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CRPL-F 229 PART A

FOR OFFICIAL USE

PART A  
IONOSPHERIC DATA

ISSUED  
SEPTEMBER 1963

U. S. DEPARTMENT OF COMMERCE  
NATIONAL BUREAU OF STANDARDS  
CENTRAL RADIO PROPAGATION LABORATORY  
BOULDER, COLORADO



## IONOSPHERIC DATA

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## IONOSPHERIC DATA

The CRPL-F series bulletins are issued as part of the responsibility of the Central Radio Propagation Laboratory for the exchange and distribution of ionospheric and related geophysical data. Part A, "Ionospheric Data," and Part B, "Solar-Geophysical Data," of the CRPL-F series present a variety of data in convenient form for use in research in radio propagation and the ionosphere and in other geophysical problems.

The current form of the tables of ionospheric data provides the monthly medians and, in addition, the number of values entering into the median determination (count) for all ionospheric characteristics listed. Also, when available, the upper and lower quartile values indicated by UQ and LQ in the tables, are listed for foF<sub>2</sub>, h'F<sub>2</sub>, h'F, and M(3000)F<sub>2</sub>. Quartile values are not listed for the other characteristics because of space limitations. The tables are prepared by IBM machine methods.

Beginning with CRPL-F221, Part A, "Ionospheric Data," the hourly median values for the graphs of critical frequencies and M(3000)F<sub>2</sub> were plotted by machine methods instead of manually, as in earlier issues. Graphs of critical frequencies and M(3000)F<sub>2</sub> will continue to appear. Graphs of percentage of time of occurrence for fEs and virtual heights of the regular ionospheric layers are no longer included. Data on percentage of time of occurrence of fEs above 3, 5, and 7 Mc are available from the CRPL and the IGY World Data Center for Airglow and Ionosphere.

For many years, the tables of ionospheric data appearing in the F series, Part A, listed values of medians recomputed at CRPL. While this practice enforced a certain uniformity, it was subject to some valid criticism for tampering with the original data. The tables and graphs now show the ionospheric data as they are provided by the originating laboratory. Responsibility for the accuracy and reliability of the data rests entirely with the originator.

Medians of data for the U.S. stations are computed in accordance with the recommendations of the World-Wide Soundings Committee. Data will appear in the F series, Part A, only when the complete daily-hourly tabulations have been received by the CRPL or the IGY World Data Center A for Airglow and Ionosphere.

Information on symbols, terminology, and conventions may be found in the "URSI Handbook of Ionogram Interpretation and Reduction, of the World-Wide Soundings Committee," edited by W. R. Piggott and K. Rawer (Elsevier, 1961), which supersedes previous documents. A list of symbols is available from CRPL on request.

The following table contains the latest available information on smoothed observed Zurich sunspot numbers, beginning with the minimum of April 1954. Final numbers are listed through June 1962, the succeeding values being based on provisional data.

Smoothed Observed Zurich Sunspot Number

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1954				3	4	4	5	7	8	8	10	12
1955	14	16	19	23	29	35	40	46	55	64	73	81
1956	89	98	109	119	127	137	146	150	151	156	160	164
1957	170	172	174	181	186	188	191	194	197	200	201	200
1958	199	201	201	197	191	187	185	185	184	182	181	180
1959	179	177	174	169	165	161	156	151	146	141	137	132
1960	129	125	122	120	117	114	109	102	98	93	88	84
1961	80	75	69	64	60	56	53	52	52	51	50	49
1962	45	42	40	39	39	38	36	34	32	31	30	30
1963	29	30										

Units of Ionospheric Data Tables

foF2, foEs - - - Tenths of a megacycle  
 foF1, foE - - - Hundredths of a megacycle  
 h'F2, h'F, h'E - Kilometers  
 (M3000)F2 - - - Hundredths

NOTE: Occasionally, when the median falls between two of the observed values, the median is carried an extra decimal place beyond these units. Those cases are easily identifiable by the extra digit appearing to the right of the number, in a column usually left blank.

MED - Median  
 CNT - Count  
 UQ - Upper Quartile  
 LQ - Lower Quartile

## WORLD - WIDE SOURCES OF IONOSPHERIC DATA

THE IONOSPHERIC DATA GIVEN IN TABLES 1 TO 100 AND FIGURES 1 TO 100 WERE ASSEMBLED BY THE CENTRAL RADIO PROPAGATION LABORATORY FOR ANALYSIS, CORRELATION AND DISTRIBUTION. THE FOLLOWING ARE THE SOURCES OF THE DATA IN THIS ISSUE:

REPUBLICA ARGENTINA, MINISTERIO DE MARINA  
BUENOS AIRES, ARGENTINA  
DECEPCION I., ANTARCTICA  
TRELEW, ARGENTINA

COMMONWEALTH OF AUSTRALIA, IONOSPHERIC PREDICTION SERVICE OF  
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MADRAS, INDIA (ALL INDIA RADIO)  
TIRUCHY, INDIA (ALL INDIA RADIO)  
TRIVANDRUM, INDIA (ALL INDIA RADIO)

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OKINAWA I.  
WHITE SANDS, NEW MEXICO

NATIONAL BUREAU OF STANDARDS, UNITED STATES OF AMERICA  
(CENTRAL RADIO PROPAGATION LABORATORY)  
BARROW, ALASKA  
COLLEGE (FAIRBANKS), ALASKA (GEOPHY INST OF UNIV OF ALASKA)  
POLE STATION, ANTARCTICA  
TALARA, PERU (INSTITUTO GEOFISICO DEL PERU)

## ERRATUM

ERRATUM - CRPL- F226, P. 1, TABLE 4: THE CORRECT VALUES OF HEIGHT  
FOR WHITE SANDS, DECEMBER 1961, ARE 10 PER CENT LOWER THAN  
WERE REPORTED.







TABLE 9

		110.8N, 78.7E										TIME 75.0E													
HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT LO	81 23 12	88 14 15	84 15 13	47 13 13	44 6 16	57 23 24	82 27 24	97 27 24	96 27 24	91 27 24	88 27 24	86 27 24	86 27 24	86 27 24	86 27 24	86 27 24	86 27 24	86 27 24	86 27 24	86 27 24	86 27 24	86 27 24	86 27 24	
nF2	MED CNT LO																								
nF	MED CNT LO																								
M13000/F2	MED CNT LO	2	345	350	1	2	2	350	340	290	275	260	265	265	275	255	2						1	1	
f6F1	MED CNT																								
f6E	MED CNT																								
nE	MED CNT																								
f6Ea	MED CNT																								

SWEEP 2.5 MC TO 20.0 MC IN 5 MINUTES, MANUAL.

MARCH, 1962

TABLE 11

TRIVANDRUM, INDIA		1 8.5N, 77.0E										TIME 75.0E													
HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT LO	91 6 6	92 6 6	82 6 8	86 6 8	84 6 8	56 6 8	27 6 8	74 6 8	89 6 8	86 6 8	86 6 8	86 6 8	86 6 8	86 6 8	86 6 8	86 6 8	86 6 8	86 6 8	86 6 8	86 6 8	86 6 8	86 6 8	86 6 8	
nF2	MED CNT LO																								
nF	MED CNT LO																								
M13000/F2	MED CNT LO	2	2	3	335	4	4	23	21	21	12	8	10	26	24	18	11	9				1	2	3	
f6F1	MED CNT																								
f6E	MED CNT																								
nE	MED CNT																								
f6Ea	MED CNT																								

SWEEP 2.5 MC TO 20.0 MC IN 5 MINUTES, MANUAL.

MARCH, 1962

TABLE 10

KODAKANAL, INDIA													110.2N, 77.5E										TIME 75.5E									
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23								
f6F2	MED CNT LO	85 23 23	79 23 23	68 23 23	47 23 23	40 23 23	28 23 23	40 23 23	72 23 23	88 23 23	94 23 23	87 23 23	86 23 23	86 23 23	86 23 23	86 23 23	86 23 23	86 23 23	86 23 23	86 23 23	86 23 23	86 23 23	86 23 23									
nF2	MED CNT LO																															
nF	MED CNT LO																															
M13000/F2	MED CNT LO	325 123 123	330 20 23	330 23 23	335 23 23	330 23 23	320 23 23	320 23 23	320 23 23	320 23 23	320 23 23	320 23 23	320 23 23	320 23 23	320 23 23	320 23 23	320 23 23	320 23 23	320 23 23	320 23 23	320 23 23	320 23 23	320 23 23									
f6F1	MED CNT																															
f6E	MED CNT																															
nE	MED CNT																															
f6Ea	MED CNT																															

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

MARCH, 1962

TABLE 12

BARROW, ALASKA																								171.3N, 156.8W										TIME 150.0W									
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23																			
f6F2	MED	U	U	U	U	U	U	U	34	33	32	27	56	52	56	52	52	52	57	57	U	U	U	U																			
	CNT	7	4	3	3	3	3	3	3	3	3	3	20	26	24	28	28	26	27	21	26	29	30																				
	LO	32	32	40	37	35	36	36	40	38	46	50	52	56	60	59	56	53	48	37	30	37	32																				
	LO	27	24	32	29	32	24	29	31	29	36	43	44	45	46	48	49	43	33	27	22	24	26																				
nF2	MED																																										
	CNT																																										
	LO																																										
nF	MED	U	U	U	U	U	U	U	380	395	280	250	295	290	290	280	280	280	285	295	E	U	U	E																			
	CNT	310	260	310									325	320	365	300	305	300	320	380	450	410	450																				
	LO	340	390	370					415	365	500	460	330	325	320	320	365	300	300	320	380	450	410	450																			
	LO	300	280	260					320	285	344	315	260	235	235	230	230	220	235	240	240	260	275	300																			
M13000/F2	MED	U	U	U	U	U	U	U	380	350	360	390	295	310	300	365	300	300	290	290	U	U	U	U																			
	CNT	310	4	5	2	2	2	2	300	300	260	280	335	345	364	320	335	330	330	335	260	270	310																				
	LO	320	330	330	330	330	330	330	415	365	270	300	310	340	360	320	335	330	330	335	260	270	310																				
	LO	310							250	265	240	260	265	265	285	285	285	280	290	290	295	280	260																				
f6F1	MED																																										
	CNT																																										
f6E	MED																																										
	CNT																																										
nE	MED																																										
	CNT																																										
f6Ea	MED	42	36	42	41	38	30	36	36	34	28		24	27	27	28	27	27	27	27	25	25	27	30																			
	CNT	24	23	20	19	22	23	22	24	23	200	22	24											26																			
	LO																							26																			
	LO																							26																			

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

FEBRUARY, 1962



TABLE 18

MONDRIJING, WESTERN AUSTRALIA 132-05, 110-2E																								TIME 120-0E			
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
f6F2	MED CNT UO LO	44 23 24 24	43 24 24 24	40 24 24 24	37 25 25 23	37 25 25 23	46 23 22 22	54 21 21 26	60 27 26 27	67 22 21 26	72 28 28 27	78 24 26 27	83 27 26 27	88 24 26 27	93 27 26 27	98 24 26 27	103 27 26 27	108 24 26 27	113 27 26 27	118 24 26 27	123 27 26 27	128 24 26 27	133 27 26 27	138 24 26 27			
nF2	MED CNT UO LO																										
nF	MED CNT UO LO	280 21 22 23	260 22 23 24	270 23 24 25	250 24 25 26	260 25 26 27	235 21 22 23	210 16 17 18	200 17 18 19	200 17 18 19	200 17 18 19	200 17 18 19	200 17 18 19	200 17 18 19	200 17 18 19	200 17 18 19	200 17 18 19	200 17 18 19	200 17 18 19	200 17 18 19	200 17 18 19	200 17 18 19	200 17 18 19	200 17 18 19			
M3000IF2	MED CNT UO LO	290 23 22 23	300 22 23 24	300 22 23 24	310 23 24 25	310 24 25 26	330 25 26 27	320 19 21 22	290 19 21 22	260 19 21 22	230 19 21 22	200 19 21 22	170 19 21 22	140 19 21 22	110 19 21 22	80 19 21 22	50 19 21 22	20 19 21 22	0 19 21 22	0 19 21 22	0 19 21 22	0 19 21 22	0 19 21 22	0 19 21 22			
f6FI	MED CNT						390 1 9	420 12 16	450 16 18	480 18 21	510 21 24	540 24 27	570 27 30	600 30 33	630 33 36	660 36 39	690 39 42	720 42 45	750 45 48	780 48 51	810 51 54	840 54 57	870 57 60	900 60 63			
f6E	MED CNT						200 2 10	250 10 21	300 21 22	320 22 23	340 23 24	360 24 25	380 25 26	400 26 27	420 27 28	440 28 29	460 29 30	480 30 31	500 31 32	520 32 33	540 33 34	560 34 35	580 35 36	600 36 37			
nE	MED CNT																										
f6Ea	MED CNT																										

SHEEP 1.6 MC TO 20.0 MC IN 18 SECONDS.

NOVEMBER, 1961

TABLE 20

TRELEU, ARGENTINA 143.25, 65.3W																								TIME 60-0W			
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
f6F2	MED CNT UO LO	68 13 8 8	69 8 8 8	66 8 8 8	68 8 7 5	70 7 5 5	73 5 5 5	71 5 5 5	73 5 5 5	71 5 5 5	73 5 5 5	71 5 5 5	73 5 5 5	71 5 5 5	73 5 5 5	71 5 5 5	73 5 5 5	71 5 5 5	73 5 5 5	71 5 5 5	73 5 5 5	71 5 5 5	73 5 5 5	71 5 5 5			
N F2	MED CNT UO LO																										
N F	MED CNT UO LO	300 17 16 10	300 16 10 11	300 240 235 230	230 11 11 8	235 11 11 8	230 5 5 5																				
M3000IF2	MED CNT UO LO	275 9 6 6	275 6 6 4	275 315 330 350	290 7 4 2	290 4 2 2	345 2 2 2																				
f6F1	MED CNT																										
f6E	MED CNT																										
N E	MED CNT																										
f6Ea	MED CNT																										

SHEEP 1.3 MC TO 18.0 MC IN 30 SECONDS.

NOVEMBER, 1961

TABLE 17

WHITE SANDS, NEW MEXICO																								132-3N, 106-5W				TIME 105-0W			
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23							
f6F2	MED CNT UO LO	35 28 29 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30	36 29 30 30							
nF2	MED CNT UO LO																														
nF	MED CNT UO LO	277 28 29 30	266 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30	262 28 29 30							
M3000IF2	MED CNT UO LO	290 28 29 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30	300 29 30 30							
f6FI	MED CNT																														
f6E	MED CNT																														
nE	MED CNT																														
f6E4	MED CNT																														

SHEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

NOVEMBER, 1961

TABLE 19

BUENOS AIRES, ARGENTINA 134-55, 56-5W																								TIME 60-0W			
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
f6F2	MED CNT UO LO	76 12 17	70 17	70 14	64 13	68 19	68 19	68 19	73 15	79 15	86 14	97 17	107 16	114 12	119 11	120 11	117 14	109 15	100 16	96 20	92 18	88 16	84 14	80 12			
nF2	MED CNT UO LO																										
nF	MED CNT UO LO	320 19 21	305 21	290 19	260 18	240 18	240 18	240 18	240 18	240 18	240 18	240 18	240 18	240 18	240 18	240 18	240 18	240 18	240 18	240 18	240 18	240 18	240 18	240 18			
M3000IF2	MED CNT UO LO	270 8 15	280 15 14	300 14 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13	320 13			
f6FI	MED CNT																										
f6E	MED CNT																										
nE	MED CNT																										
f6Ea	MED CNT																										

SHEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

NOVEMBER, 1961







TABLE 3c

[illegible]

SLEEP 0.33 MC TO 20.5 MC IN 3 MINUTES.

OCTOBER, 1961

TABLE 3c

[illegible]

SWEEP 1.0 MC TO 17.0 MC IN 15 SECONDS.

OCTOBER, 1961

TABLE 31

[illegible]

SPEED 1.0 MC TO 18.0 MC IN 4 MINUTES.

OCTOBER, 1961

TABLE 32

[illegible]

WEEP 1.0 MC TO 10.0 MC IN 20 SECONDS.

ОСТОНЕР - 1961)













TABLE 54

CAPETOWN, UNION OF S. AFRICA												134+15, 18+3E												TIME 30.0E			
HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
f <sub>o</sub> F <sub>2</sub>	MED CNT UO LO	38 24 24	38 24 24	37 24 24	36 24 24	35 24 24	32 24 24	44 24 24	60 24 24	71 24 24	76 24 24	84 24 24	91 24 24	98 26 26	100 26 26	100 26 26	100 25 25	100 25 25	94 25 25	92 25 25	84 25 25	70 25 25	54 25 25	46 25 25	41		
h <sub>o</sub> F <sub>2</sub>	MED CNT UO LO								260 1	250 14	275 15	295 23	300 24	305 23	305 23	295 26	300 24	280 24	270 24	250 18							
h <sub>o</sub> F	MED CNT UO LO																										
M3000IF <sub>2</sub>	MED CNT UO LO																										
f <sub>o</sub> F <sub>1</sub>	MED CNT																										
f <sub>o</sub> E	MED CNT																										
h <sub>o</sub> E	MED CNT																										
f <sub>o</sub> Ea	MED CNT																										

SWEEP 1.0 MC TO 17.0 MC IN 7 SECONDS.

OCTOBER, 1961

TABLE 53

BRISBANE, AUSTRALIA		127+55, 152+9E1																		TIME 150+0E					
HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f <sub>o</sub> F2	MED CNT UO LO	58 20 20	50 20 20	46 20 20	44 22 22	44 22 22	46 22 22	70 22 22	70 22 22	80 22 22	82 22 22	83 22 22	85 22 22	89 22 22	85 22 22	80 22 22	77 22 22	77 22 22	82 22 22	79 22 22	75 22 22	70 22 22	63 22 22	62 22 22	60
h <sub>o</sub> F2	MED CNT UO LO																								
h <sub>o</sub> F	MED CNT UO LO																								
M3000IF2	MED CNT UO LO	280 19	285 19	275 19	275 19	275 21	200 22	320 22	320 22	315 23	315 23	295 25	290 24	300 24	295 23	290 23	290 25	300 25	305 25	305 25	285 25	280 25	270 24	260 24	265 23
f <sub>o</sub> F1	MED CNT																								
f <sub>o</sub> E	MED CNT																								
h <sub>o</sub> E	MED CNT																								
f <sub>o</sub> Ea	MED CNT																								

SWEEP 1.0 MC TO 16.0 MC IN 1 MINUTE 55 SECONDS.

OCTOBER, 1961

TABLE 55

BUENOS AIRES, ARGENTINA														134+55, 58+5W										TIME 60+0W		
HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
f <sub>o</sub> F2	MED CNT UO LO	68 23 23	72 23 23	74 24 24	66 24 24	55 22 22	54 22 22	54 22 22	53 24 24	72 24 24	82 24 24	98 24 24	105 24 24	118 24 24	120 24 24	126 24 24	126 24 24	127 24 24	119 24 24	110 24 24	94 24 24	84 24 24	74 24 24	72 24 24	74	
h'F2	MED CNT UO LO							U 250 1	250 1	265 1	300 14	300 22	310 26	310 26	310 24	300 24	290 24	270 24	260 24							
h'F	MED CNT UO LO	310 23	300 23	260 23	225 23	245 18	265 22	230 23	230 26	230 17	220 5	220 5	215 5	U 210	225 5	235 11	235 11	250 18	250 23	240 27	240 26	235 23	300 22	310 22	310 25	
M3000F2	MED CNT UO LO	270 20	275 18	320 20	345 19	295 18	300 20	345 21	335 23	320 23	300 20	290 21	300 17	310 13	310 14	300 14	310 14	320 19	330 20	330 15	325 16	280 17	270 17	265 22	270 18	
f <sub>o</sub> F1	MED CNT													U 480	U 4	U 4	U 450	U 410								
f <sub>o</sub> E	MED CNT							230 9	290 9									U 310	U 260							
h'E	MED CNT							166 2	121 10	121 12	115 6	119 5	U 115	U 3	U 4	U 4	121 4	121 4	119 9	115 3	U 1	U 1	U 1	U 1	U 1	
f <sub>o</sub> Ea	MED CNT																									

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

OCTOBER, 1961

TABLE 56

CANBERRA, AUSTRALIA		139+35, 149+0E1																		TIME 150+0E					
HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f <sub>o</sub> F2	MED CNT UO LO	50 24 24	46 24 24	44 24 24	40 24 24	38 24 24	38 24 24	50 24 24	56 24 24	62 24 24	68 24 24	71 24 24	75 24 24	76 24 24	76 24 24	75 24 24	74 24 24	72 24 24	70 24 24	73 24 24	70 24 24	65 24 24	58 24 24	55 24 24	52
h <sub>o</sub> F2	MED CNT UO LO																								
h <sub>o</sub> F	MED CNT UO LO																								
M3000IF2	MED CNT UO LO																								
f <sub>o</sub> F1	MED CNT																								
f <sub>o</sub> E	MED CNT																								
h <sub>o</sub> E	MED CNT																								
f <sub>o</sub> Ea	MED CNT																								

SWEEP 1.0 MC TO 25.0 MC IN 30 SECONDS.

OCTOBER, 1961





TABLE 62

[illegible]

SEPTEMBER, 1961

TABLE 64

[illegible]

SEPTEMBER, 1961

TABLE 6.1

		167°BN, 20°NE										TIME 15:00														
		KIRUNA, SWEDEN																								
HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
f6F2	MEQ	3.0	2.8	2.7	2.6	2.5	2.4	2.3	2.2	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8	0.7	0.6	
	LO	5	7	12	13	21	26	22	24	26	24	26	28	28	27	27	27	29	26	27	23	13	9	5	7	3
f6F2	MEQ																									
	LO																									
f6F2	MEQ	2.85	2.85	2.80	2.70	2.60	2.50	2.45	2.40	2.35	2.30	2.25	2.20	2.15	2.10	2.05	2.00	1.95	1.90	1.85	1.80	1.75	1.70	1.65	1.60	
	LO	8	11	20	22	25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55	57	59	61	63	65
f6F	MEQ	3.20	3.10	3.00	2.95	2.80	2.55	2.40	2.30	2.25	2.15	2.10	2.05	2.10	2.10	2.15	2.25	2.35	2.40	2.50	2.55	2.55	2.80	3.00	3.05	
	LO	18	19	21	19	21	28	21	22	23	25	27	26	27	24	23	25	26	27	27	27	24	22	10	21	17
f6F	MEQ	2.70	2.80	2.80	2.80	2.90	3.00	3.20	3.25	3.10	3.20	3.10	3.20	3.20	3.20	3.20	3.30	3.25	3.20	3.20	3.10	2.80	2.80	2.80	2.50	
	LO	5	5	9	12	21	46	21	22	24	23	26	27	28	24	27	29	26	26	22	13	5	3	5	2	
f6F1	MEQ																									
	LO																									
f6E	MEQ	3.50	3.50	3.60	4.00	4.00	4.10	4.10	4.00	3.90	3.55	3.70	3.40													
	LO	2	8	13	18	22	23	15	15	10	3	1														
f6E	MEQ	1.50	1.60	1.90	2.20	2.40	2.60	2.70	2.80	2.80	2.60	2.40	2.10	1.80	1.80	1.45										
	LO	4	9	17	22	24	27	22	23	22	21	18	20	14	6	4	1									
f6E	MEQ	1.10	1.10	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.10	1.10	1.15											
	LO	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
f6E	MEQ	4.0	35	32	32	25																				
	LO	20	16	18	15	16	17	20	18	200	2	25	25	23	20	22	27	26	23	30	36	41	44	40	19	10

SEPTEMBER, 1961

TABLE 63

INVERNESS, SCOTLAND													157-AN-4		4+2-20		0-1		TIME						
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
f6F2	MED CNT	40	36	33	30	25	25	36	44	51	55	57	60	62	61	63	60	62	63	64	62	59	53	49	41
	LO	13	12	11	13	13	22	26	24	24	23	23	23	24	23	23	23	25	21	25	22	18	19	16	14
n'F2	MED CNT								300	300	300	300	300	300	300	300	296	316							
	LO								4	9	18	20	22	18	18	12	5								
n'F	MED CNT	230	298	295	290	290	260	250	230	215	210	205	205	205	210	210	220	230	240	250	245	250	250	255	260
	LO	22	24	21	22	19	19	24	24	23	24	23	21	24	23	21	23	24	26	25	23	26	25	20	17
M3000/F2	MED CNT	290	290	285	285	285	295	320	325	320	315	315	310	320	320	320	315	315	320	315	310	305	300	300	300
	LO	9	8	5	5	7	12	21	18	22	21	18	19	24	22	23	21	21	11	15	10	9	8	5	4
f6F1	MED CNT								390	410	420	420	430	430	430	400	400								
	LO								3	13	17	16	16	11	7	3	3								
f6E	MED CNT						170	210	255	280	300	310	320	315	310	295	260	220	190	160					
	LO						14	22	22	22	22	23	18	16	15	21	19	24	20	15	6				
n'E	MED CNT						130	115	110	105	105	105	110	110	115	130	150								
	LO						6	17	23	23	23	22	22	21	23	19	21	14	8						
f6E3	MED CNT						14	11	17	23	27	30	31	32	31	30	27	26	22	16					
	LO						22	25	25	24	24	24	20	22	23	23	23	25	26	26	25	24	26	25	23

SEPTEMBER, 1961



TABLE 65

(61-4M-10-1F)

SAISONALITY: 1990-1991

TIME 15.0E

[illegible]

SWEEP 1.0 MC TO 16.0 MC IN 4 MINUTES.

SEPTEMBER, 1961

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TIME 75.0W

[illegible]

SWEEP 1.0 MC TO 30.0 MC IN 16 SECONDS.

SEPTEMBER • 1961

TABLE 66

(45.4N, 141.7E)

WAKKANAI, JAPAN

TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
f02	MED	4.4	4.5	4.3	4.3	4.0	4.2	5.9	6.4	7.0	7.5	7.4	7.2	7.0	7.2	6.9	6.9	7.0	7.2	7.0	6.6	6.4	5.6	5.0	4.6	
	ONT	3.0	3.0	2.9	2.9	2.9	3.0	2.9	3.0	3.0	3.0	2.7	2.6	2.7	2.6	2.7	2.6	2.7	2.6	2.5	2.4	2.0	2.0	2.0	2.0	
	LO	4.0	4.0	4.0	4.0	3.6	3.8	5.4	5.8	6.3	7.0	6.6	6.6	6.5	6.6	6.5	6.4	6.4	6.4	6.2	6.0	5.5	5.1	4.5	4.1	
	LI																									
f'2	MED						2.75			2.6	2.70	2.65	2.90	2.90	2.95	2.85	2.85	2.90								
	ONT									1.9	2.7	2.7	2.7	2.8	2.6	2.0	1.2	5								
	LO																									
	LI																									
f'f	MED	3.05	3.00	2.95	2.70	2.65	2.70	2.45	2.45	2.40	2.20	2.15	2.15	2.20	2.30	2.35	2.35	2.50	2.50	2.50	2.50	2.55	2.55	2.70	3.00	
	ONT	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.6	2.5	2.5	2.5	2.7	2.7	2.7	2.7	2.6	2.6	2.6	2.6	2.9	2.9	3.0	3.0	
	LO	4.0	4.0	4.0	4.0	3.6	3.8	5.4	5.8	6.3	7.0	6.6	6.6	6.5	6.6	6.5	6.4	6.4	6.4	6.2	6.0	5.5	5.1	4.5	4.1	
	LI																									
f'3000F2	MED	2.60	2.80	2.60	2.95	2.90	3.00	3.30	3.30	3.30	3.30	3.30	3.25	3.20	3.20	3.15	3.20	3.20	3.20	3.20	3.15	3.10	3.00	3.10	2.90	2.85
	ONT	3.0	3.0	2.9	2.9	2.9	3.0	3.0	3.0	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9	3.0	3.0	3.0	3.0
	LO	4.0	4.0	4.0	4.0	3.6	3.8	5.4	5.8	6.3	7.0	6.6	6.6	6.5	6.6	6.5	6.4	6.4	6.4	6.2	6.0	5.5	5.1	4.5	4.1	
	LI																									
f0f1	MED						3.20	3.70		4.10	4.40	4.50	4.70	4.60	4.60	4.40	4.20									
	ONT						3	5		1.1	1.9	2.1	1.6	1.4	1.4	1.4	1.4									
f0e	MED						1.35	2.10	2.40	2.90	3.00	3.05	3.10	3.05	3.05	3.10	2.90	2.60	2.10							
	ONT						1	1.8	2.8	2.6	2.6	2.5	2.2	2.1	2.2	2.4	2.4	2.6	1.3							
f'f	MED																									
	ONT																									
f0Es	MED						2.3	2.9	2.8	3.5	3.5	3.4	3.4	2.8	2.8	2.9	2.9	2.9	2.9	2.4	2.2	3.0	3.0	3.0	3.0	
	ONT	3.0	3.0	3.0	3.0	3.0	1.8	1.9	3.0	2.8	2.70	2.2	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.4	2.2	3.0	3.0	3.0	3.0	
	LO	4.0	4.0	4.0	4.0	3.6	3.8	5.4	5.8	6.3	7.0	6.6	6.6	6.5	6.6	6.5	6.4	6.4	6.4	6.2	6.0	5.5	5.1	4.5	4.1	
	LI																									

SWEEP 1.0 MC TO 18.0 MC IN 1 MINUTE.

SEPTEMBER, 1961

TABLE 68

139-7N, 140-1E)

ARITA - JAPAN

TIME 135.0E

[illegible]

TABLE 83  
YAMAGUCHI, JAPAN  
131-29, 135-07

YAMAGAWA, JAPAN																									
		131-24-130-6F																							
TIME	135-05	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f <sub>o</sub> F2	MEQ CNT	56 57	46 47	43 44	37 38	34 35	46 47	78 79	76 77	84 85	97 98	104 105	102 103	96 97	94 95	94 95	85 86	70 71	50 51	46 47	46 47	46 47	46 47	46 47	
h'F2	MEQ CNT	51 52	41 42	38 39	34 35	30 31	40 41	65 66	71 72	70 71	75 76	75 76	89 90	92 93	93 94	89 90	86 87	75 76	60 61	37 38	38 39	38 39	38 39	38 39	
h'F	MEQ CNT	240 241	255 256	280 281	250 251	275 276	260 261	235 236	220 221	220 221	220 221	205 206	205 206	210 211	230 231	235 236	240 241	250 251	240 241	225 226	240 241	305 306	310 311	310 311	
M3000F2	MEQ CNT	280 281	270 271	290 291	310 311	305 306	315 316	345 346	340 341	315 316	305 306	300 301	305 306	310 311	305 306	310 311	320 321	325 326	330 331	335 336	290 291	280 281	280 281	280 281	
f <sub>o</sub> F1	MEQ CNT	440 441	480 481	500 501	510 511	500 501	470 471	420 421	340 341	36 37	35 36	21 22	25 26	17 18	9 10	2 3	2 3	2 3	2 3	2 3	2 3	2 3	2 3	23 24	
f <sub>o</sub> E	MEQ CNT	230 231	275 276	310 311	330 331	340 341	345 346	320 321	295 296	250 251	170 171	23 24	22 23	23 24	23 24	23 24	23 24	23 24	23 24	23 24	23 24	23 24	23 24	23 24	
h'E	MEQ CNT	29 30	24 25	13 14	12 13	16 17	12 13	17 18	27 28	300 301	29 30	37 38	30 31	30 31	30 31	30 31	30 31	30 31	30 31	30 31	26 27	25 26	25 26	25 26	
f <sub>o</sub> E <sub>s</sub>	MEQ CNT	29 30	24 25	13 14	12 13	16 17	12 13	17 18	27 28	300 301	29 30	37 38	30 31	30 31	30 31	30 31	30 31	30 31	30 31	30 31	26 27	25 26	25 26	25 26	

SWEEP 1.0 MC TO 20.0 MC IN 30 SECONDS.

SEPTEMBER, 1961

TABLE 84  
FURUBUJ, TOKYO, JAPAN  
135-79, 139-50

KORUMJULI, TOKYO, JAPAN																								135-7N, 139-5E												TIME 135-05											
HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23																						
f <sub>o</sub> F2		MEQ	55	44	53	45	62	61	76	76	76	80	84	84	83	80	80	85	86	78	59	49	46	46																							
		CNT	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	29	29	28	29	29																							
h'F2		MEQ	50	50	49	44	44	45	86	90	80	81	85	88	92	95	84	94	92	88	70	54	50	51																							
		CNT	40	40	40	39	35	34	71	76	70	72	75	78	80	77	74	76	76	70	52	40	39	40																							
h'F2		MEQ	E <sub>s</sub> 450 250 250 250 295 300 235 245 245 205 205																																												
		CNT	3 11 28 29 28 30 30 29 30 30 22 8																																												
h'F		MEQ	255	300	280	250	255	260	230	230	220	205	200	200	200	205	225	225	245	245	225	250	260	185																							
		CNT	28	29	30	30	29	28	29	28	27	28	28	24	28	28	29	29	28	24	26	28	29	28																							
M3000F2		MEQ	280	275	290	290	290	290	325	335	340	330	310	305	300	305	310	315	315	315	330	320	285	275	280																						
		CNT	48	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	49	48	28	27	28																							
f <sub>o</sub> F1		MEQ	U																																												
		CNT	390 420 460 470 470 420 480 460 450 420 420 420 420 420 420 420 420 420 420 420 420 420 420 420 420																																												
f <sub>o</sub> E		MEQ	U																																												
		CNT	140 215 260 300 325 330 340 340 335 325 310 270 215 140 140 215 260 300 325 330 340 340 335 325 310																																												
h'E		MEQ	U																																												
		CNT	1 11 21 20 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18 18																																												
f <sub>o</sub> E <sub>s</sub>		MEQ	25	22	18	20	19	22	23	32	33	37	36	36	33	33	32	32	30	30	28	29	29	26	22																						
		CNT	20	18	24	26	26	15	27	26	30	300	20	29	25	29	29	30	26	28	22	23	25	27	28																						

SWEEP 1.0 MC TO 20.0 MC IN 20 SECONDS.

SEPTEMBER, 1961

TABLE 72  
PORT Moresby, PAPUA  
1 9-45, 147-1E

PORT MORESBY, PAPUA																									
		1 0.45, 1.67, 1E3																							
HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f <sub>o</sub> F2	MEQ	74	60	40	34	34	32	40	80	96	105	106	111	112	108	104	99	102	96	96	86	84	76	75	
	CNT	18	21	20	20	19	19	20	14	21	19	18	13	16	18	16	16	17	19	20	18	16	17	13	
	U													U	U	U	U	U	U	U	U	U	U		
	LO																								
h'F2	MEQ																								
	CNT																								
	U																								
	LO																								
h'F	MEQ	215	200	210	250	250	250	220	200	190	180	180	175	180	175	170	200	230	245	240	240	220	220	210	
	CNT	15	22	19	21	20	20	21	20	17	17	10	13	18	15	14	13	20	23	24	24	23	23	23	
	U																								
	LO																								
M3000F2	MEQ	325	335	310	305	305	300	310	330	330	320	310	310	305	310	300	300	310	300	310	295	305	300	320	
	CNT	17	21	19	19	19	18	20	13	17	18	17	16	15	17	16	15	15	19	20	16	13	14	10	15
	U																								
	LO																								
f <sub>o</sub> F1	MEQ								450	460	460	510	490	510	510	440	480								
	CNT								12	20	19	17	19	21	20	17	10								
f <sub>o</sub> E	MEQ													U											
	CNT													2	370	300	250	180							
h'E	MEQ																								
	CNT																								
f <sub>o</sub> E <sub>s</sub>	MEQ																								
	CNT																								

SWEEP 1.0 MC TO 25.0 MC IN 30 SECONDS.

SEPTEMBER, 1961

JOHANNESBURG, UNION OF S. AFRICA (26.15, 28.1E)

TABLE 7B

[illegible]

SEPTEMBER, 1961

TABLE 80

[illegible]

1061

TABLE 378V

[illegible]

SEPTEMBER, 1961

TABLE 79

MOON	GOOLEY HEAD (CHRISTCHURCH), N.Z.	14.3.65.	172.8E	TIME 1800.0
16F2	<div> <div>U</div> <div> <div>46.42</div> <div>23</div> </div> <div> <div>+1</div> <div>21</div> </div> <div> <div>39</div> <div>20</div> </div> </div> <div> <div>31</div> <div>19</div> </div> <div> <div>27</div> <div>18</div> </div> <div> <div>56</div> <div>28</div> </div> <div> <div>60</div> <div>26</div> </div> <div> <div>40</div> <div>28</div> </div> <div> <div>52</div> <div>26</div> </div> <div> <div>56</div> <div>28</div> </div> <div> <div>17</div> <div>26</div> </div> <div> <div>16</div> <div>28</div> </div> <div> <div>15</div> <div>26</div> </div> <div> <div>17</div> <div>28</div> </div> <div> <div>19</div> <div>26</div> </div> <div> <div>20</div> <div>28</div> </div> <div> <div>21</div> <div>26</div> </div> <div> <div>22</div> <div>28</div> </div> <div> <div>23</div> <div>26</div> </div> <div> <div>24</div> <div>28</div> </div> <div> <div>25</div> <div>26</div> </div> <div> <div>27</div> <div>28</div> </div> <div> <div>28</div> <div>26</div> </div> <div> <div>29</div> <div>28</div> </div> <div> <div>30</div> <div>26</div> </div> <div> <div>31</div> <div>28</div> </div> <div> <div>32</div> <div>26</div> </div> <div> <div>33</div> <div>28</div> </div> <div> <div>34</div> <div>26</div> </div> <div> <div>35</div> <div>28</div> </div> <div> <div>36</div> <div>26</div> </div> <div> <div>37</div> <div>28</div> </div> <div> <div>38</div> <div>26</div> </div> <div> <div>39</div> <div>28</div> </div> <div> <div>40</div> <div>26</div> </div> <div> <div>41</div> <div>28</div> </div> <div> <div>42</div> <div>26</div> </div> <div> <div>43</div> <div>28</div> </div> <div> <div>44</div> <div>26</div> </div> <div> <div>45</div> <div>28</div> </div> <div> <div>46</div> <div>26</div> </div> <div> <div>47</div> <div>28</div> </div> <div> <div>48</div> <div>26</div> </div> <div> <div>49</div> <div>28</div> </div> <div> <div>50</div> <div>26</div> </div> <div> <div>51</div> <div>28</div> </div> <div> <div>52</div> <div>26</div> </div> <div> <div>53</div> <div>28</div> </div> <div> <div>54</div> <div>26</div> </div> <div> <div>55</div> <div>28</div> </div> <div> <div>56</div> <div>26</div> </div> <div> <div>57</div> <div>28</div> </div> <div> <div>58</div> <div>26</div> </div> <div> <div>59</div> <div>28</div> </div> <div> <div>60</div> <div>26</div> </div>	<div> <div>60</div> <div>28</div> </div> <div> <div>52</div> <div>26</div> </div> <div> <div>56</div> <div>28</div> </div> <div> <div>17</div> <div>26</div> </div> <div> <div>16</div> <div>28</div> </div> <div> <div>15</div> <div>26</div> </div> <div> <div>17</div> <div>28</div> </div> <div> <div>19</div> <div>26</div> </div> <div> <div>20</div> <div>28</div> </div> <div> <div>21</div> <div>26</div> </div> <div> <div>22</div> <div>28</div> </div> <div> <div>23</div> <div>26</div> </div> <div> <div>24</div> <div>28</div> </div> <div> <div>25</div> <div>26</div> </div> <div> <div>27</div> <div>28</div> </div> <div> <div>28</div> <div>26</div> </div> <div> <div>29</div> <div>28</div> </div> <div> <div>30</div> <div>26</div> </div> <div> <div>31</div> <div>28</div> </div> <div> <div>32</div> <div>26</div> </div> <div> <div>33</div> <div>28</div> </div> <div> <div>34</div> <div>26</div> </div> <div> <div>35</div> <div>28</div> </div> <div> <div>36</div> <div>26</div> </div> <div> <div>37</div> <div>28</div> </div> <div> <div>38</div> <div>26</div> </div> <div> <div>39</div> <div>28</div> </div> <div> <div>40</div> <div>26</div> </div> <div> <div>41</div> <div>28</div> </div> <div> <div>42</div> <div>26</div> </div> <div> <div>43</div> <div>28</div> </div> <div> <div>44</div> <div>26</div> </div> <div> <div>45</div> <div>28</div> </div> <div> <div>46</div> <div>26</div> </div> <div> <div>47</div> <div>28</div> </div> <div> <div>48</div> <div>26</div> </div> <div> <div>49</div> <div>28</div> </div> <div> <div>50</div> <div>26</div> </div> <div> <div>51</div> <div>28</div> </div> <div> <div>52</div> <div>26</div> </div> <div> <div>53</div> <div>28</div> </div> <div> <div>54</div> <div>26</div> </div> <div> <div>55</div> <div>28</div> </div> <div> <div>56</div> <div>26</div> </div> <div> <div>57</div> <div>28</div> </div> <div> <div>58</div> <div>26</div> </div> <div> <div>59</div> <div>28</div> </div> <div> <div>60</div> <div>26</div> </div>	<div> <div>60</div> <div>28</div> </div> <div> <div>52</div> <div>26</div> </div> <div> <div>56</div> <div>28</div> </div> <div> <div>17</div> <div>26</div> </div> <div> <div>16</div> <div>28</div> </div> <div> <div>15</div> <div>26</div> </div> <div> <div>17</div> <div>28</div> </div> <div> <div>19</div> <div>26</div> </div> <div> <div>20</div> <div>28</div> </div> <div> <div>21</div> <div>26</div> </div> <div> <div>22</div> <div>28</div> </div> <div> <div>23</div> <div>26</div> </div> <div> <div>24</div> <div>28</div> </div> <div> <div>25</div> <div>26</div> </div> <div> <div>27</div> <div>28</div> </div> <div> <div>28</div> <div>26</div> </div> <div> <div>29</div> <div>28</div> </div> <div> <div>30</div> <div>26</div> </div> <div> <div>31</div> <div>28</div> </div> <div> <div>32</div> <div>26</div> </div> <div> <div>33</div> <div>28</div> </div> <div> <div>34</div> <div>26</div> </div> <div> <div>35</div> <div>28</div> </div> <div> <div>36</div> <div>26</div> </div> <div> <div>37</div> <div>28</div> </div> <div> <div>38</div> <div>26</div> </div> <div> <div>39</div> <div>28</div> </div> <div> <div>40</div> <div>26</div> </div> <div> <div>41</div> <div>28</div> </div> <div> <div>42</div> <div>26</div> </div> <div> <div>43</div> <div>28</div> </div> <div> <div>44</div> <div>26</div> </div> <div> <div>45</div> <div>28</div> </div> <div> <div>46</div> <div>26</div> </div> <div> <div>47</div> <div>28</div> </div> <div> <div>48</div> <div>26</div> </div> <div> <div>49</div> <div>28</div> </div> <div> <div>50</div> <div>26</div> </div> <div> <div>51</div> <div>28</div> </div> <div> <div>52</div> <div>26</div> </div> <div> <div>53</div> <div>28</div> </div> <div> <div>54</div> <div>26</div> </div> <div> <div>55</div> <div>28</div> </div> <div> <div>56</div> <div>26</div> </div> <div> <div>57</div> <div>28</div> </div> <div> <div>58</div> <div>26</div> </div> <div> <div>59</div> <div>28</div> </div> <div> <div>60</div> <div>26</div> </div>	<div> <div>60</div> <div>28</div> </div> <div> <div>52</div> <div>26</div> </div> <div> <div>56</div> <div>28</div> </div> <div> <div>17</div> <div>26</div> </div> <div> <div>16</div> <div>28</div> </div> <div> <div>15</div> <div>26</div> </div> <div> <div>17</div> <div>28</div> </div> <div> <div>19</div> <div>26</div> </div> <div> <div>20</div> <div>28</div> </div> <div> <div>21</div> <div>26</div> </div> <div> <div>22</div> <div>28</div> </div> <div> <div>23</div> <div>26</div> </div> <div> <div>24</div> <div>28</div> </div> <div> <div>25</div> <div>26</div> </div> <div> <div>27</div> <div>28</div> </div> <div> <div>28</div> <div>26</div> </div> <div> <div>29</div> <div>28</div> </div> <div> <div>30</div> <div>26</div> </div> <div> <div>31</div> <div>28</div> </div> <div> <div>32</div> <div>26</div> </div> <div> <div>33</div> <div>28</div> </div> <div> </div>

SEPTEMBER, 1961

633MS

TABLE 81

SAO PAULO, BRAZIL (23.55, 46.5W) TIME 45.0W

[illegible]

SWEEP 1.0 MC TO 25.0 MC.

JUNE • 1961

TABLE 83

NOOR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
h'F2	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
h'F	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
M30001F2	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
f6F1	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
f6E	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
h'E	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
f6Ea	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
f6Ea	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				
	CNT	5	10	14	16	15	17	16	28	27	26	24	23	4	17	24	24	24	15	14				
	MEQ	U	0.8	U	4	40	27	68	20	0.6	1.6	67	97	101	109	179	123	117	113	108				

SWEEP 1.0 MC TO 25.0 MC IN 25 SECONDS.

MAY 24, 1961

TABLE 82

FREIBURG, GERMANY  
(48.1N, 7.6E)  
TIME 0.0

[illegible]

SWEEP 1.25 MC TO 20.0 MC IN 3 MINUTES.

MARCH, 1961

TABLE 84

[illegible]



TABLE 2. 86

3A-CN. 23-AE1

ATHENS, GREECE

HOIR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6 F2	MED	20	23	29	33	37	38	34	40	71	75	85	88	94	91	86	84	95	82	85	82	86	84	82	81
	CNT	24	27	23	21	23	22	21	25	25	26	26	27	23	26	27	26	25	24	25	25	24	22	21	
	LO	42	43	43	42	44	40	40	43	75	82	82	86	100	96	94	92	84	87	76	58	52	48	45	
	U	37	36	37	36	35	33	30	37	63	72	78	84	87	86	80	78	81	74	60	45	42	40	39	
	LQ	230	240	255	250	240	230	240	230	370	270	280	265	240	250	230	210	220	200	205	210	225	235	245	260
f6 F2	MED	20	23	29	33	37	38	34	40	71	75	85	88	94	91	86	84	95	82	85	82	86	84	82	81
	CNT	24	27	23	21	23	22	21	25	25	26	26	27	23	26	27	26	25	24	25	25	24	22	21	
	LO	42	43	43	42	44	40	40	43	75	82	82	86	100	96	94	92	84	87	76	58	52	48	45	
	U	37	36	37	36	35	33	30	37	63	72	78	84	87	86	80	78	81	74	60	45	42	40	39	
	LQ	230	240	255	250	240	230	240	230	370	270	280	265	240	250	230	210	220	200	205	210	225	235	245	260
M3000/F2	MED	276	271	475	483	376	283	291	000	336	332	326	317	318	311	319	314	319	330	333	308	286	294	284	280
	CNT	24	22	23	21	24	22	21	25	25	26	24	27	23	26	28	26	24	25	25	25	24	23	22	
	LO	286	290	486	499	410	300	502	212	348	341	341	328	337	332	338	331	328	334	336	322	302	308	298	287
	U	463	467	276	273	270	273	286	242	248	241	313	304	311	500	353	359	311	322	306	294	278	276	262	261
	LQ																								
f6 F1	MED									400	410	450	350	440	440	430	350								
	CNT													8	8	3	1								
f6 E	MED								143	122	262	320	320	335	336	348	365	273	226	145					
	CNT									21	25	26	23	27	29	26	26	24	23	10					
f6 N	MED									423	404	377	1045	107	103	107	107	169	115	156					
	CNT									18	20	19	23	23	24	24	24	22	3						
f6 Ea	MED									E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	CNT									E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E

FEBRUARY, 1961

TABLE 68

HOUR	10/10/85 06:00																								TIME
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
f6F2	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	43	44	52	54	56	63	58	62	61	53	63	60	56	50	43	42	40	34	39	35	42	40	40	
	LO	20	16	17	14	14	15	19	16	18	22	23	23	19	19	23	20	18	13	6	12	11	14	10	
f6F2	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	270	240	235	205	210	216	210	220	220	230	230	235	235	255	255	205	270	260	340	250	275	210	270	
	LO	17	13	15	16	14	15	11	12	17	15	17	17	18	15	21	18	12	6	6	11	10	13		
f6F2	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	295	275	270	260	280	270	268	260	260	260	265	270	270	230	295	305	200	315	285	325	295	290	280	
	LO	14	15	11	11	12	15	18	15	19	21	23	21	18	17	19	18	15	9	5	6	9	10	8	
f6F1	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	360	360	380	400	420	420	430	430	420	430	420	420	400	400	400	305	200	315	285	325	295	290	280	
	LO	6	12	11	14	15	15	14	17	18	20	16	16	9	1	1	1	1	1	1	1	1	1	1	
f6E	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	200	200	260	270	300	330	320	320	330	310	300	290	280	280	280	100	100	100	100	100	100	100	100	
	LO	17	17	8	12	14	15	13	10	14	10	12	9	13	10	9	10	7	6	6	6	4	6	5	
f6E	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	120	120	135	140	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	
	LO	9	9	12	13	15	15	13	10	11	10	10	11	11	12	10	9	7	6	6	6	6	6	5	
f6E	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
	CNT	295	275	270	260	280	270	268	260	260	260	265	270	270	230	295	305	200	315	285	325	295	290	280	
	LO	14	15	11	11	12	15	18	15	19	21	23	21	18	17	19	18	15	9	5	6	9	10	8	

February 1965

TABLE 85

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
FeF2	MED	36	36	34	34	28	31	26	69	74	80	83	84	81	82	78	74	58	50	42	39	38	38	
	CNT	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	
	LO	38	38	38	38	32	34	59	76	81	86	86	50	84	50	86	78	72	62	46	44	42		
	UD	33	32	32	32	28	25	28	52	64	70	73	80	77	77	76	74	59	56	50	45	39	36	34
N F2	MED								405	370	240	250	255	245	245									
	CNT								3	3	5	9	11	9	3									
	LO																							
	UD																							
N F	MED	280	280	278	270	259	250	145	228	225	220	220	220	212	225	228	220	220	222	218	248	235	275	272
	CNT	28	28	28	28	28	27	28	28	28	28	28	28	28	28	28	28	27	28	28	28	28	27	28
	LO																							
	UD																							
M3000/F2	MED	284	284	284	284	284	323	362	324	348	344	340	334	332	310	334	334	335	332	314	308	300	293	284
	CNT	28	28	28	28	28	28	27	28	328	348	348	348	348	28	28	28	377	368	368	368	368	368	
	LO	252	286	286	286	286	306	306	306	336	318	283	242	345	341	337	342	344	362	350	341	306	303	294
	UD	176	271	278	274	263	287	281	311	306	298	284	272	324	314	323	329	327	316	298	295	286	283	272
FeF1	MED								342	368	385	402	400	415										
	CNT								1	2	2	2	2	2										
	LO																							
	UD																							
FeE	MED								228	265	282	285	300	290	270	245	240	E						
	CNT								24	24	24	28	28	28	27	27	16							
	LO																							
	UD																							
N E	MED								14	14	11	98	104	109	111	113	118	122	E					
	CNT								20	22	25	21	23	23	21	24	22	20						
	LO																							
	UD																							
FeEs	MED	28	48	38	28	28	28	28	28	280	270	28	28	28	27	28	28	32	16	E	E	E	28	28
	CNT																							
	LO																							
	UD																							

FEBRUARY, 1961

TABLE 87

[illegible]

CEFB01168y - 201

TABLE 90  
 198-1987 7-6E)





TABLE 97

EUREKA, CANADA													(80-0N, 85-9N)										TIME 75-00				
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
16F2	MEQ	55	57	53	55	54	53	55	55	53	56	56	58	56	57	58	58	58	58	55	56	56	54				
	CNT	21	22	23	24	21	23	21	21	19	20	18	19	19	19	19	20	22	21	22	21	21	21				
17F2	MEQ	490	440	480	440	400	500	500	500	500	520	530	530	530	540	520	500	510	460	470	500	500	490	480			
	CNT	13	11	16	13	14	15	14	10	15	16	16	15	14	14	18	18	17	18	17	17	16	16	14			
17F	MEQ	250	250	240	240	240	230	230	240	230	230	230	220	220	220	220	220	230	220	240	240	240	240	250			
	CNT	22	21	21	23	22	22	21	23	21	21	16	17	17	18	17	19	20	19	17	20	18	21	21			
180000F2	MEQ	410	400	400	410	430	400	440	440	460	460	480	460	470	470	470	470	460	440	440	440	420	410	410			
	CNT	17	15	17	16	21	22	23	22	21	21	21	20	20	20	20	21	22	22	21	22	18	16	17			
16E	MEQ	260	260	260	270	280	290	300	310	320	320	330	330	340	340	330	330	320	320	300	300	280	280	270			
	CNT	19	22	22	23	22	22	22	23	21	21	18	17	19	18	18	20	20	20	20	20	20	20	20			
17E	MEQ	135	105	105	165	105	105	165	160	160	160	105	100	100	100	160	100	105	100	105	105	105	110	110			
	CNT	19	20	19	20	23	23	23	21	19	19	17	17	16	15	15	15	17	16	17	18	17	20	20			
16E1	MEQ																										
	CNT																										

SWEEP 1-6 MC TO 20-0 MC IN 15 SECONDS.

JUNE, 1958

TABLE 98\*

CAPE TOWN, UNION OF S. AFRICA										13-15, 18-21										TIME 30-00									
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23					
16 F2	MEQ CNT LO	58 15 58	57 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58	58 15 58						
17 F2	MEQ CNT LO	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250	250 13 250						
18 F	MEQ CNT LO	330 14 330	345 15 330	320 15 330	295 15 330	310 15 330	320 15 330	340 15 330	250 15 330	235 15 330	235 15 330	230 15 330	230 15 330	230 15 330	230 15 330	230 15 330	230 15 330	230 15 330	230 15 330	230 15 330	230 15 330	230 15 330	230 15 330						
180000F2	MEQ CNT LO	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260	260 13 260						
16 F1	MEQ CNT	410 17	400 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17						
16 E	MEQ CNT	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19						
17 E	MEQ CNT	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19						
16 E1	MEQ CNT	410 17	400 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17						

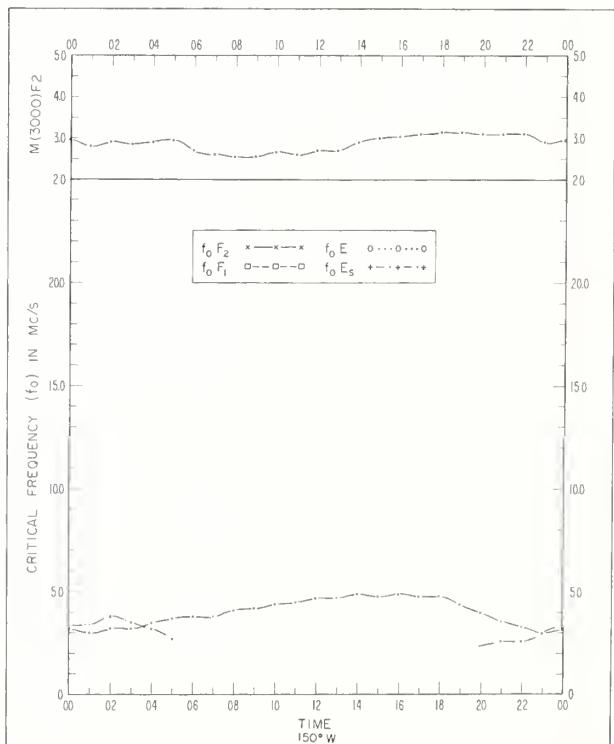
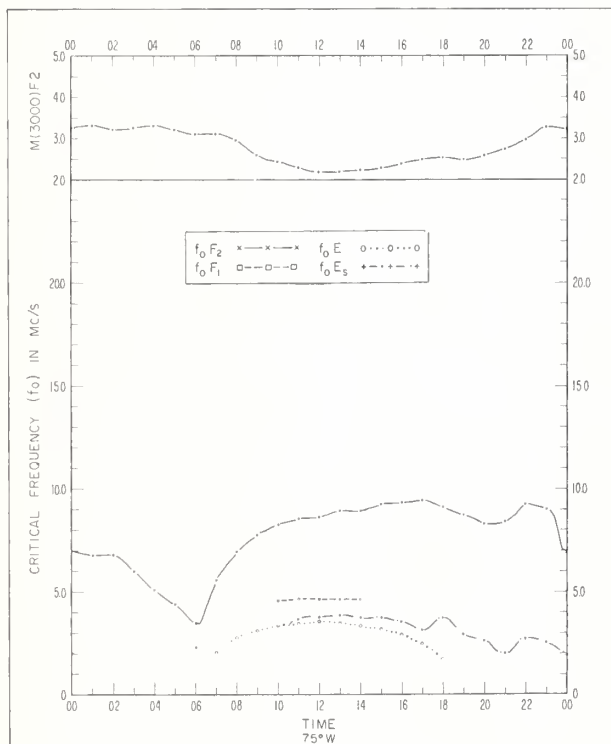
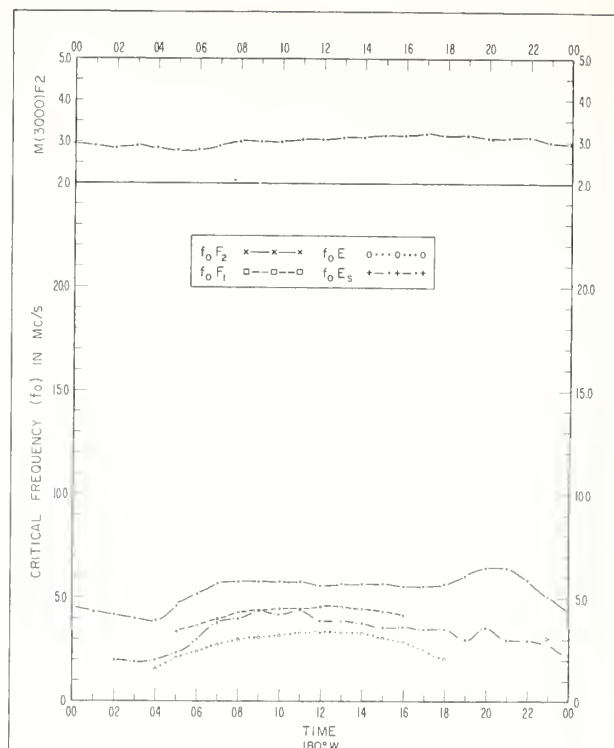
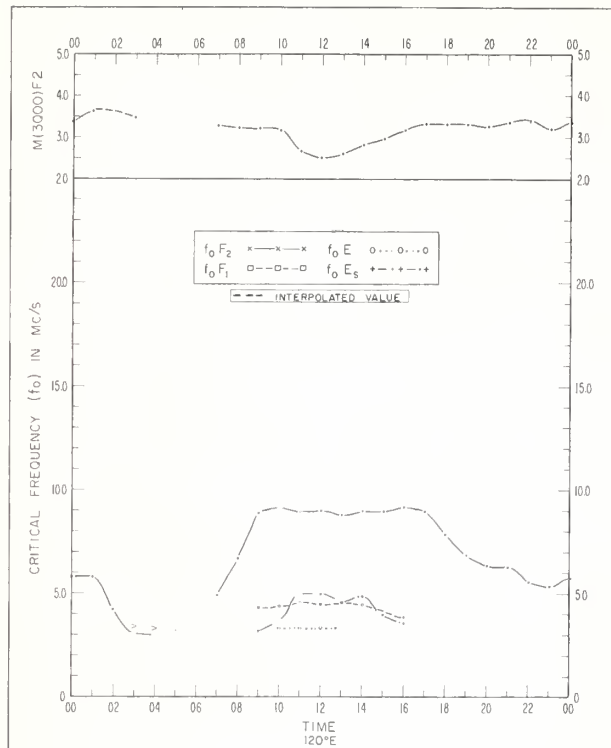
SWEEP 1-0 MC TO 17-0 MC IN 7 SECONDS.

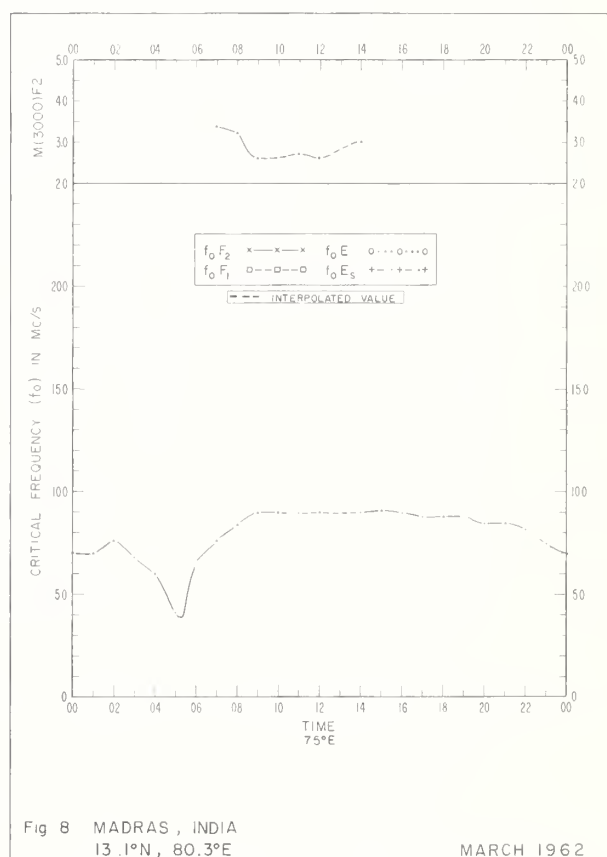
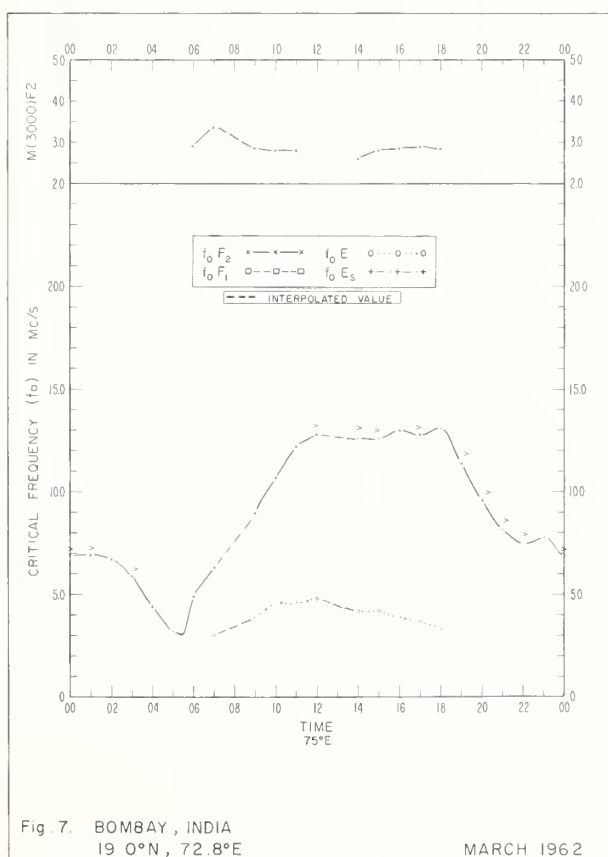
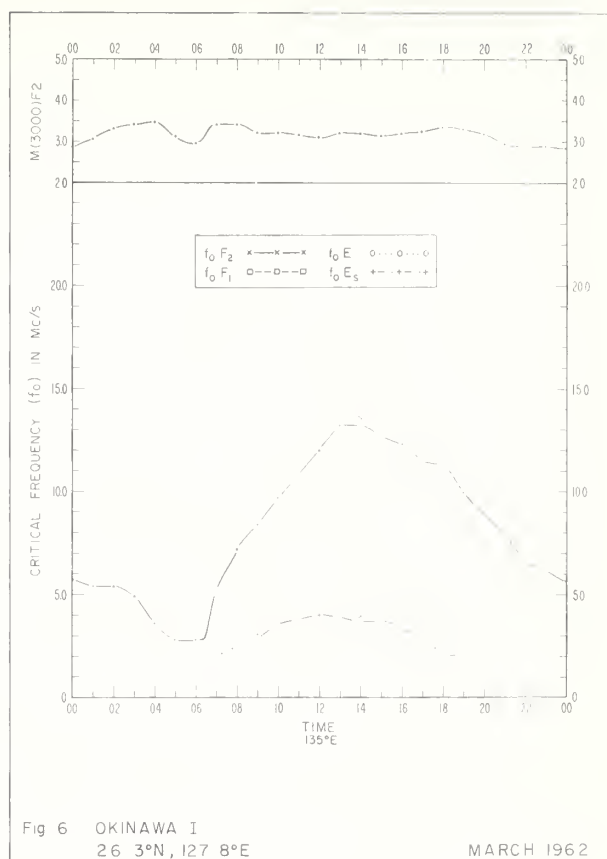
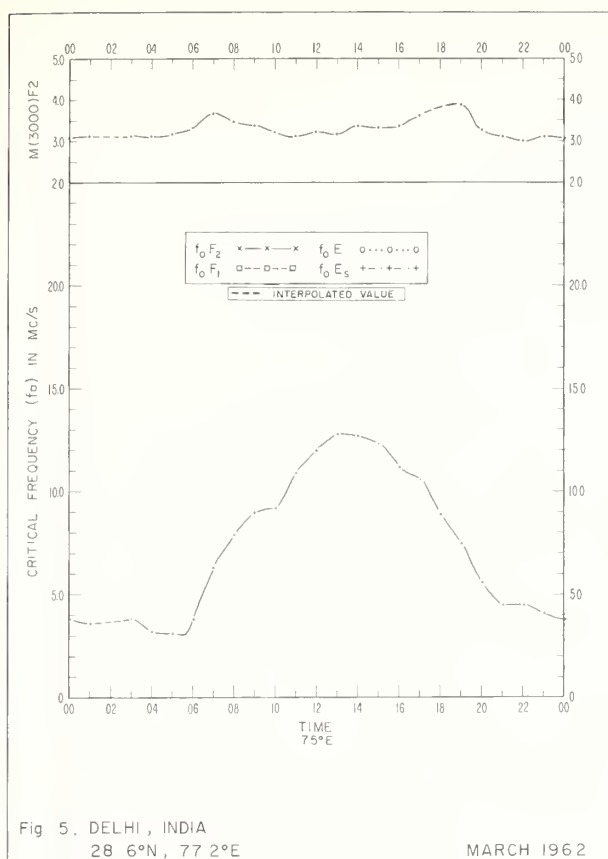
\*ALL VALUES ARE INDICATED.

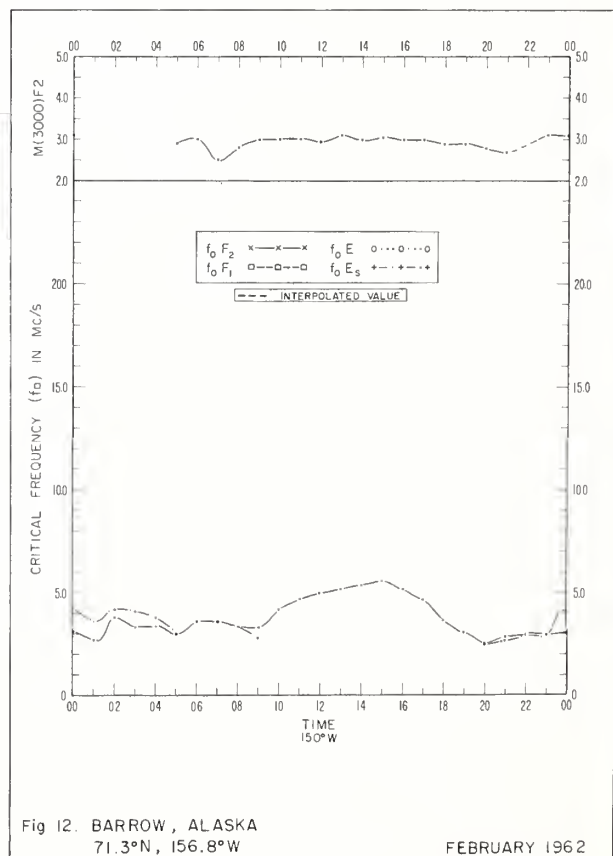
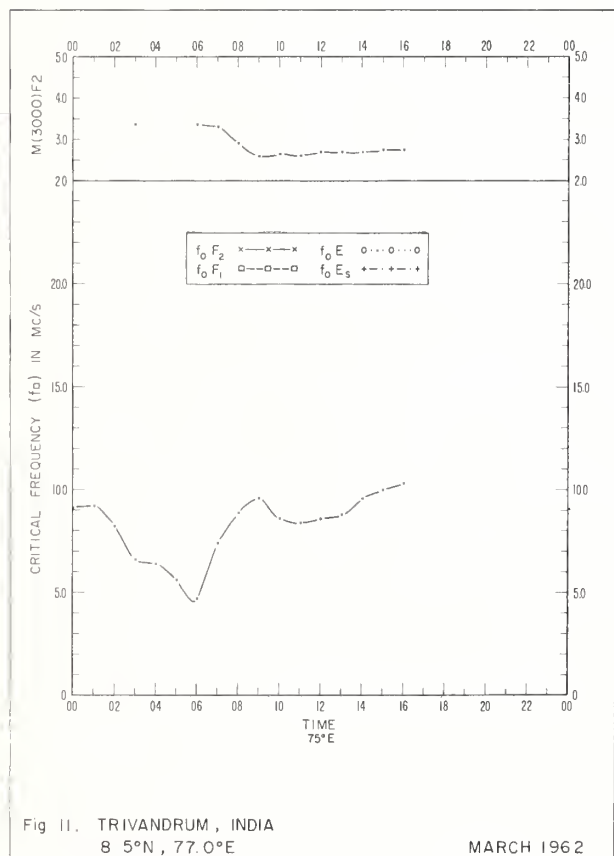
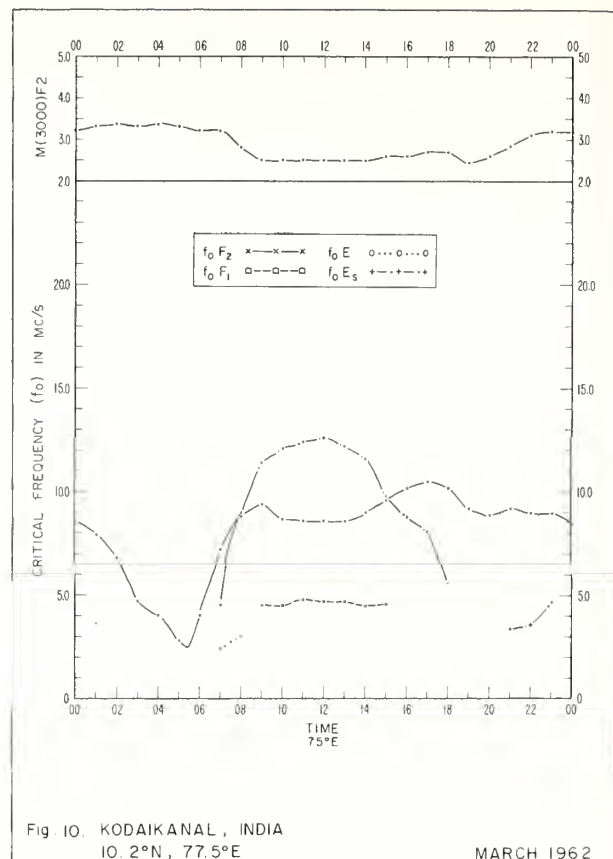
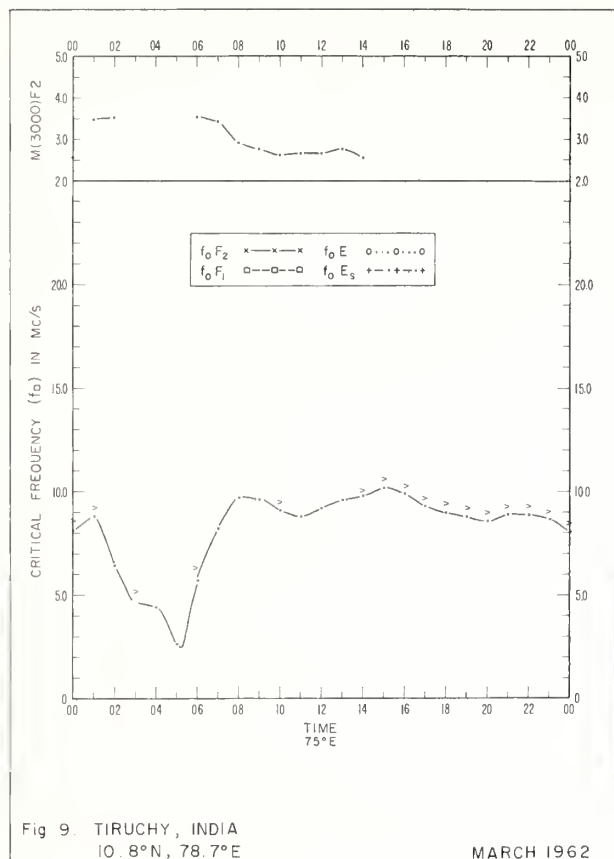
JUNE, 1958

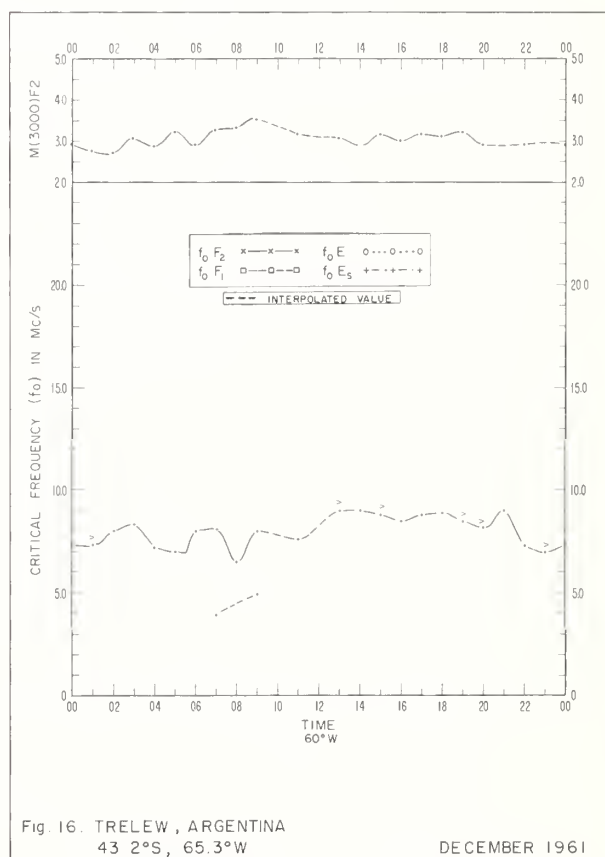
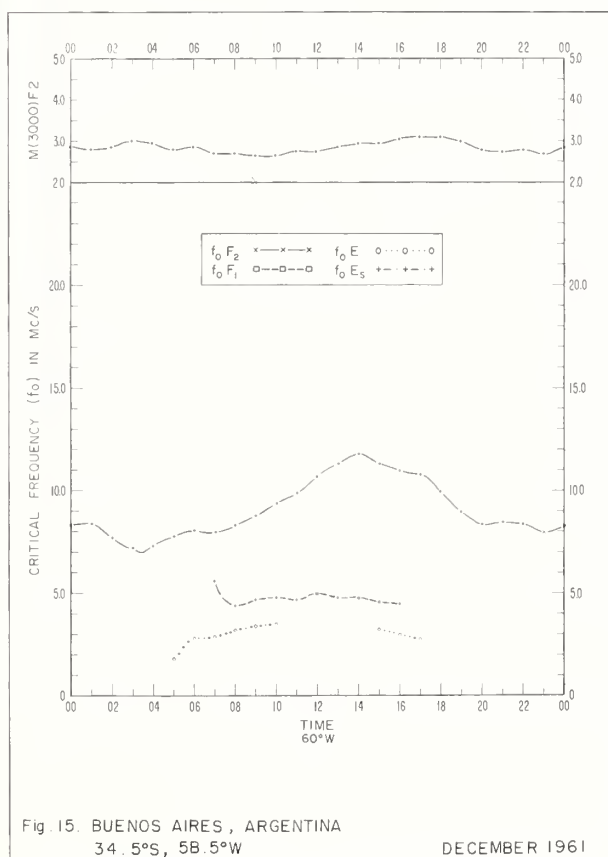
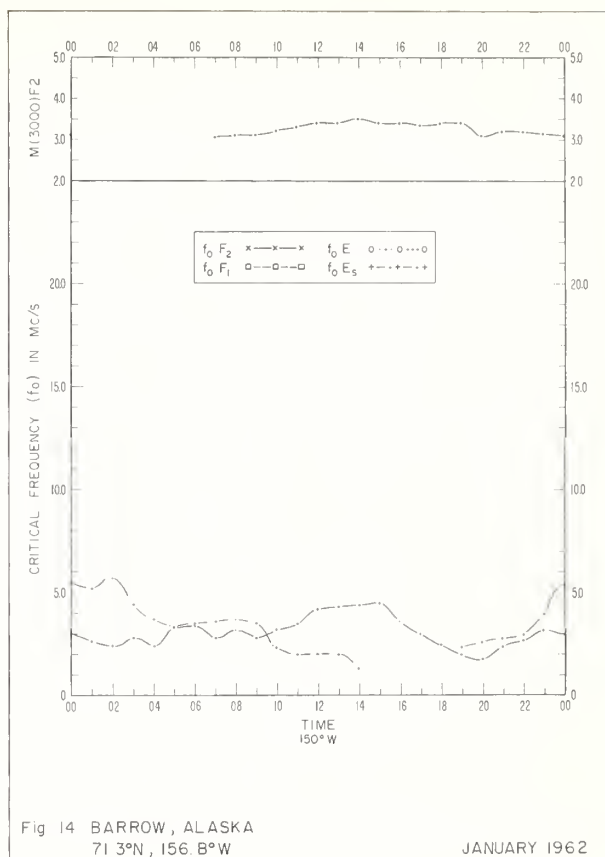
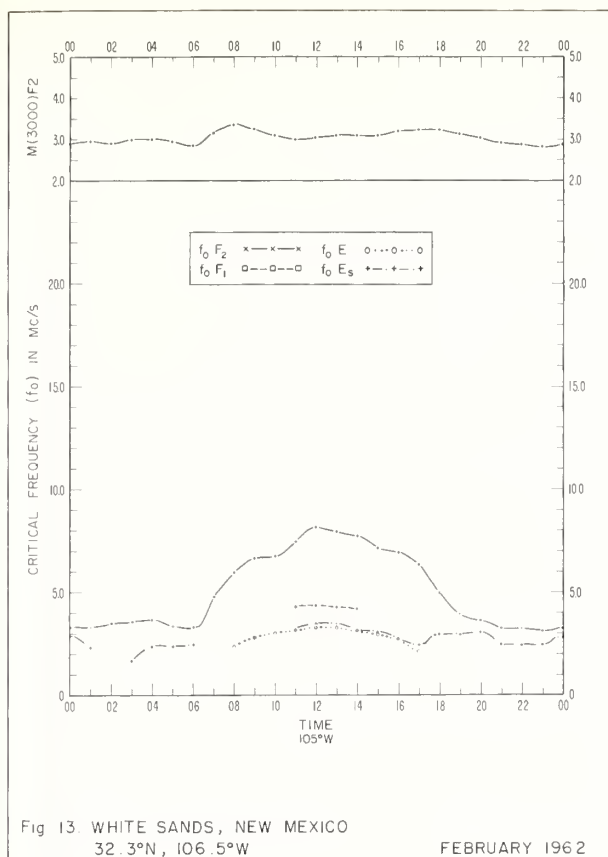
TABLE 99

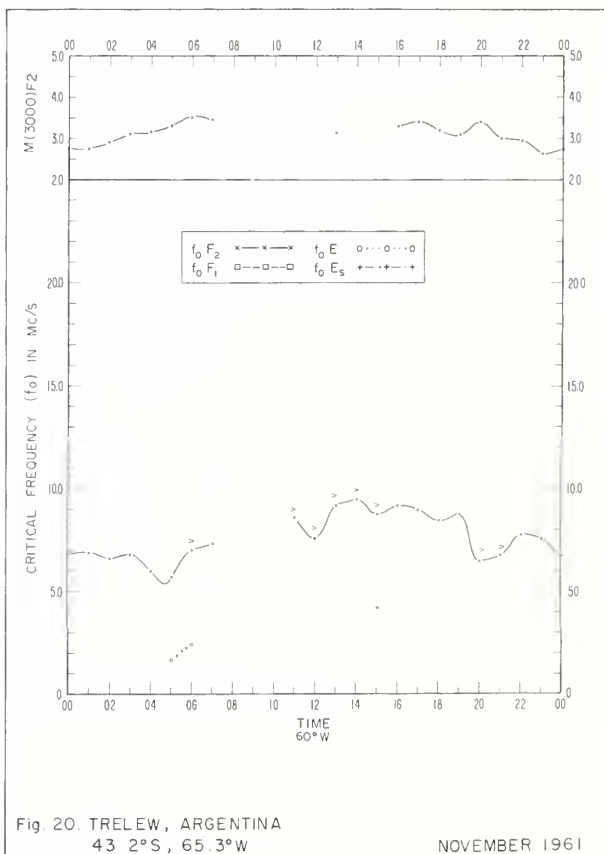
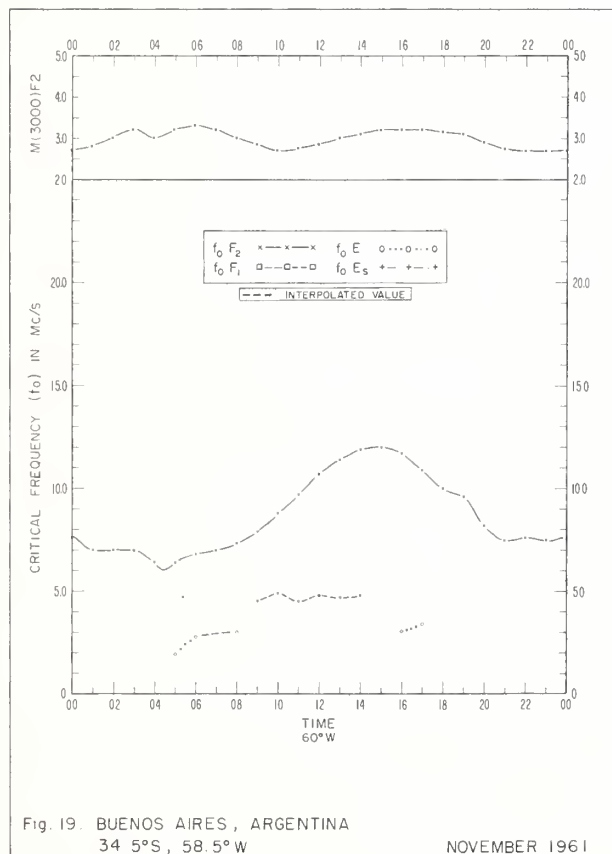
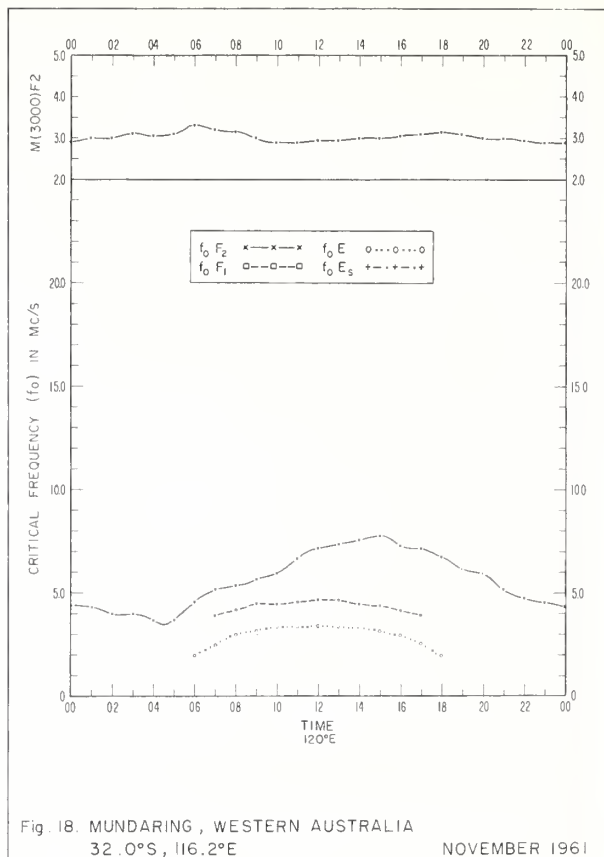
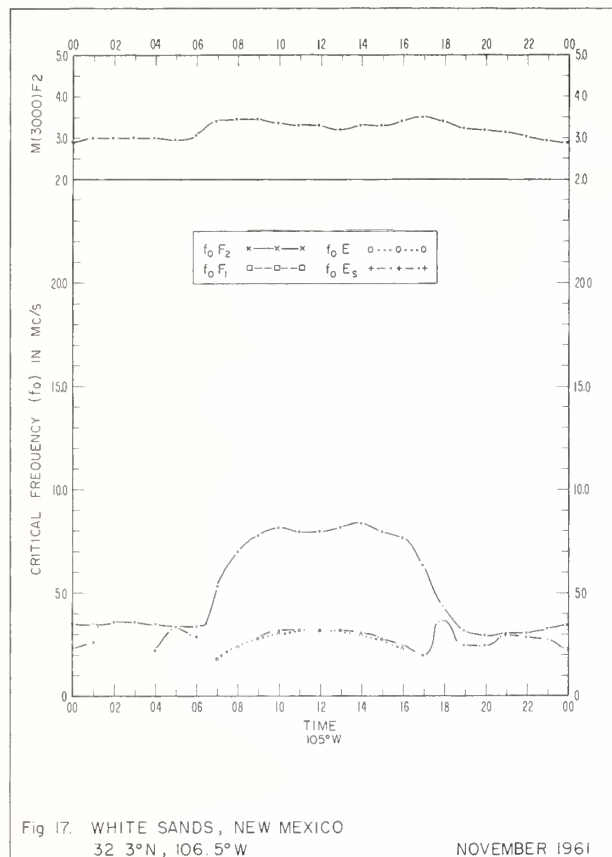
JULIUSBURG/ROGGEN, GERMANY													15-16N, 13-14E													TIME 15-00												
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23														
16F2	MEQ CNT LO	55 29 55	51 29 55	50 29 55	42 21 55	46 21 55	50 21 55	62 21 55	79 21 55	87 21 55	101 21 55	108 21 55	124 21 55	123 21 55	121 21 55	117 21 55	114 21 55	113 21 55	108 21 55	96 21 55	83 21 55	72 21 55	62 21 55															
17F2	MEQ CNT LO	55 29 55	51 29 55	50 29 55	46 21 55	42 21 55	50 21 55	62 21 55	79 21 55	87 21 55	101 21 55	108 21 55	124 21 55	123 21 55	121 21 55	117 21 55	114 21 55	113 21 55	108 21 55	96 21 55	83 21 55	72 21 55	62 21 55															
17F	MEQ CNT LO	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340	340 19 340															
180000F2	MEQ CNT LO	220 24 220	225 24 220	225 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220	220 24 220															
16F1	MEQ CNT	410 17	400 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17															
16E	MEQ CNT	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19	260 19															
17E	MEQ CNT	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19	105 19															
16E1	MEQ CNT	410 17	400 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17	410 17															











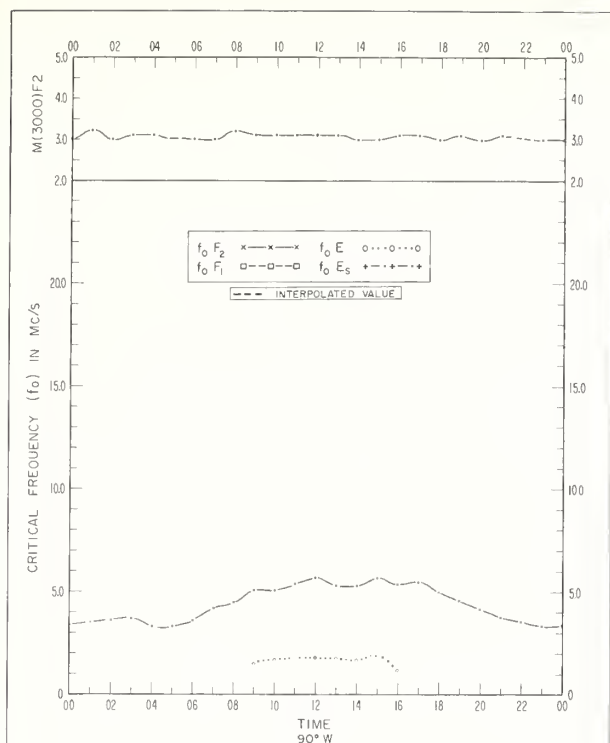


Fig. 21. RESOLUTE BAY, CANADA  
74.7°N, 94.9°W

OCTOBER 1961

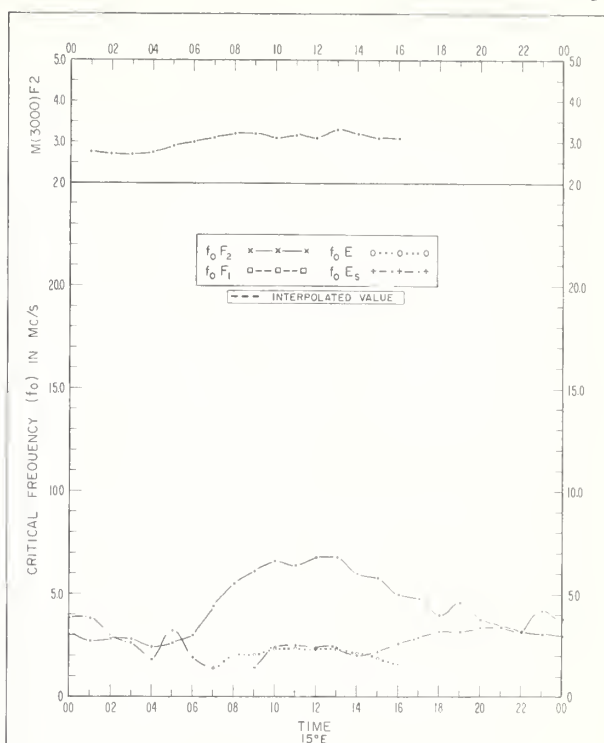


Fig. 22. TROMSØ, NORWAY  
69.7°N, 19.0°E

OCTOBER 1961

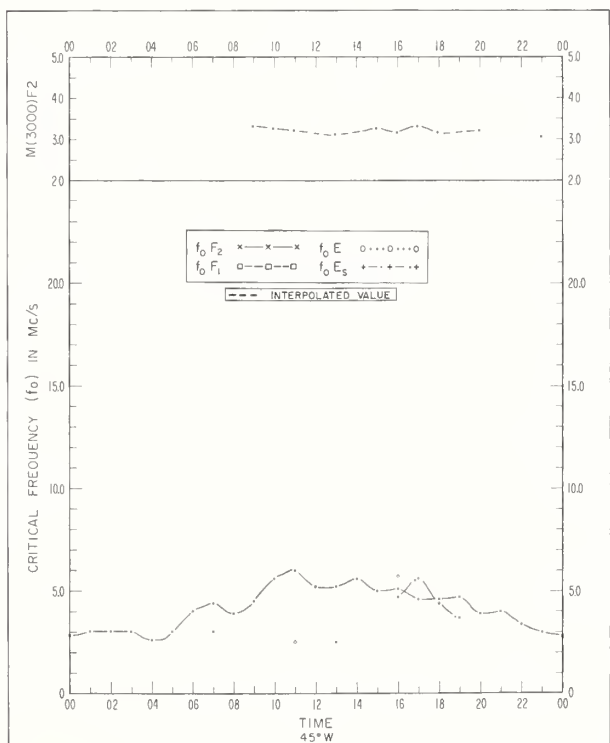


Fig. 23. GODHAVN, GREENLAND  
69.3°N, 53.5°W

OCTOBER 1961

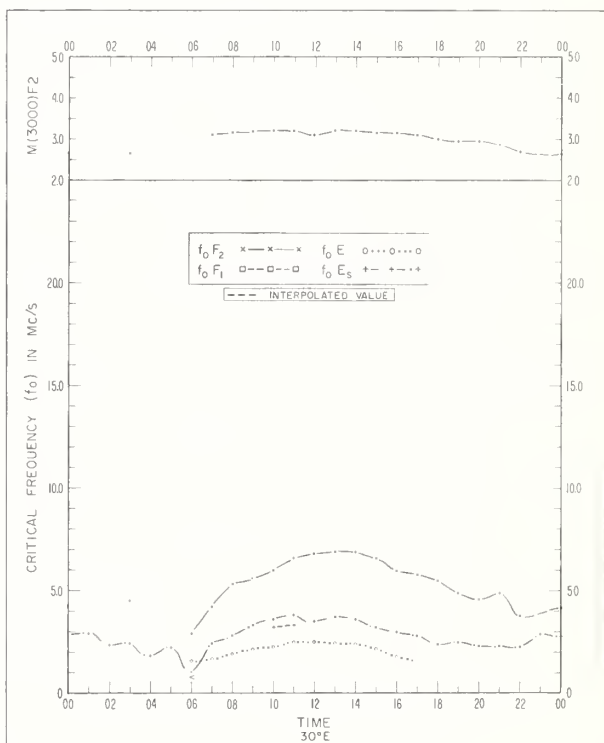


Fig. 24. SODANKYLÄ, FINLAND  
67.4°N, 26.6°E

OCTOBER 1961

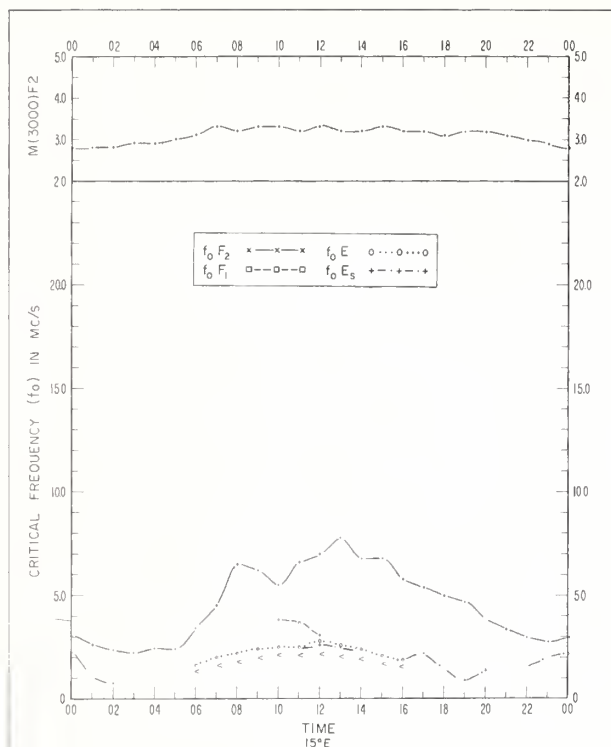


Fig 25. LULEA, SWEDEN  
65.6°N, 22 1°E

OCTOBER 1961

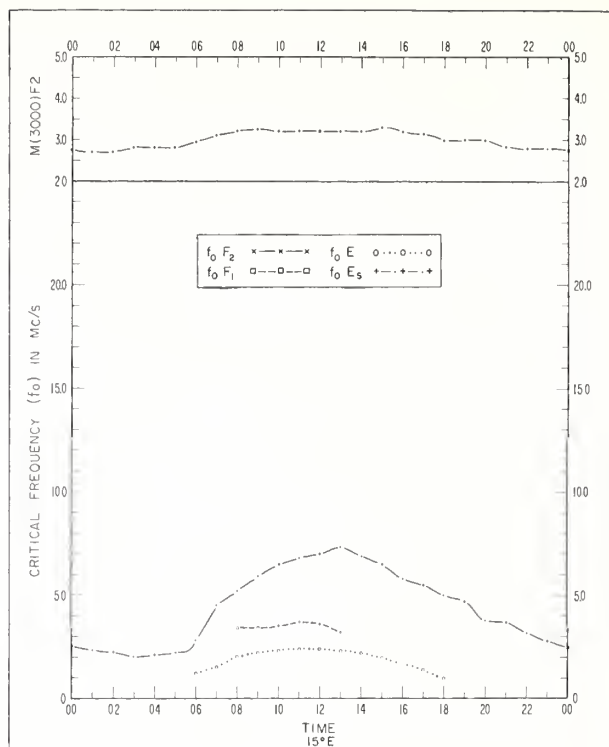


Fig 26. LYCKSELE, SWEDEN  
64.7°N, 18 8°E

OCTOBER 1961

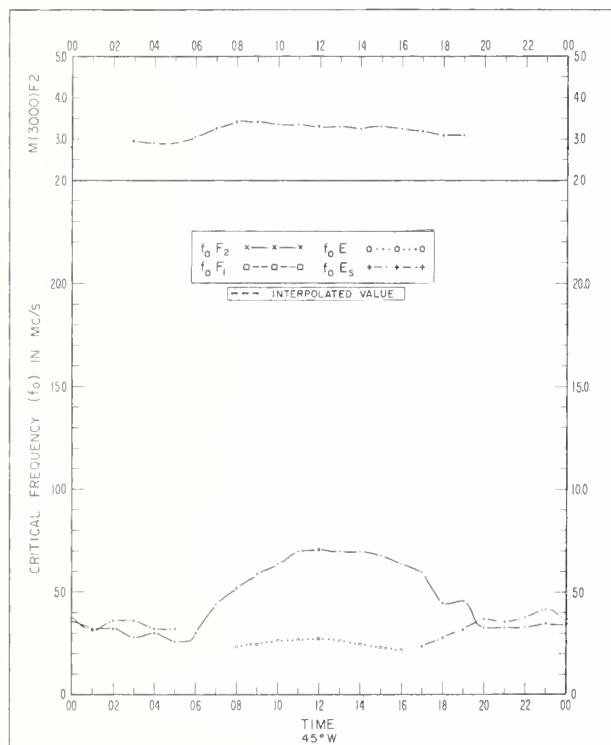


Fig 27. NARSSARSSUAQ, GREENLAND  
61.2°N, 45.4°W

OCTOBER 1961

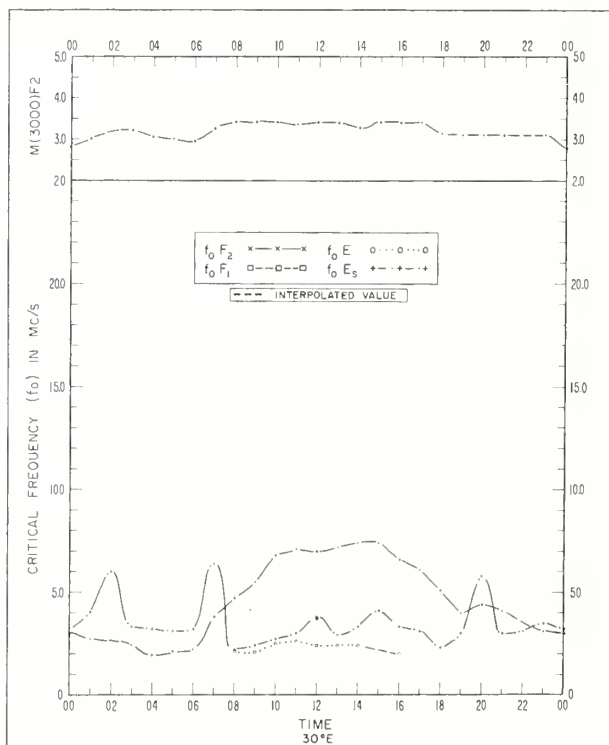
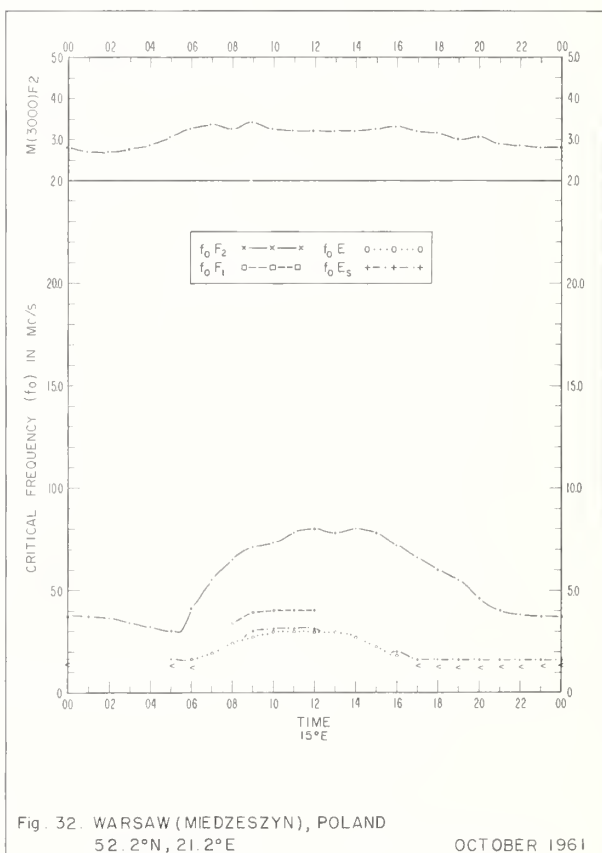
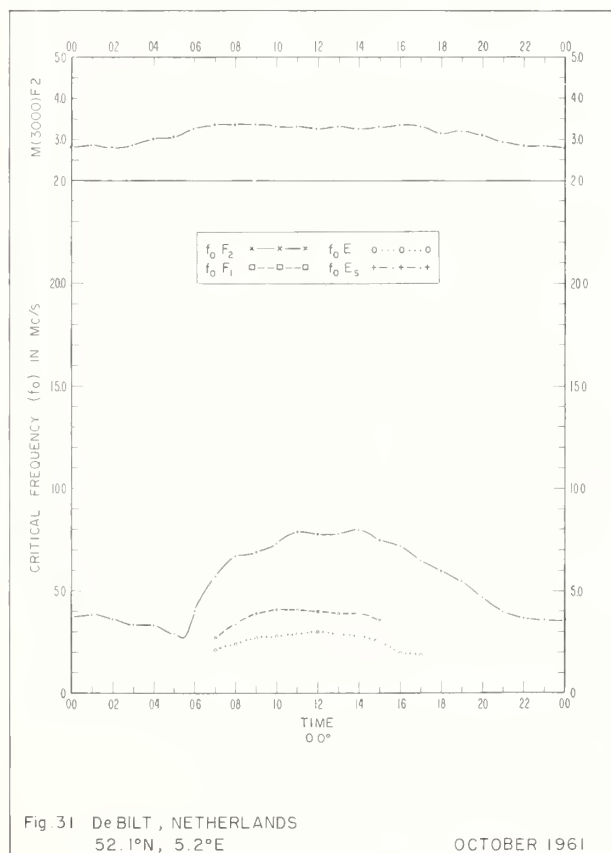
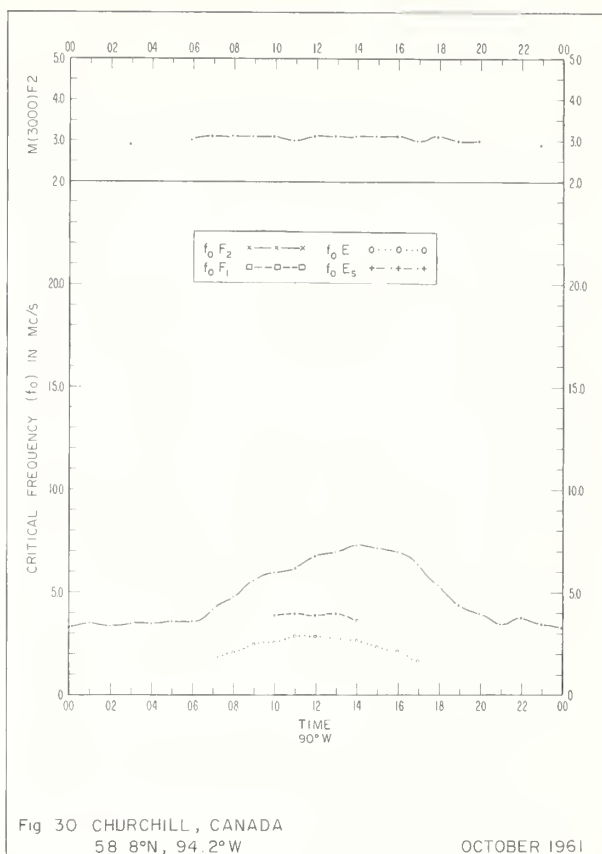
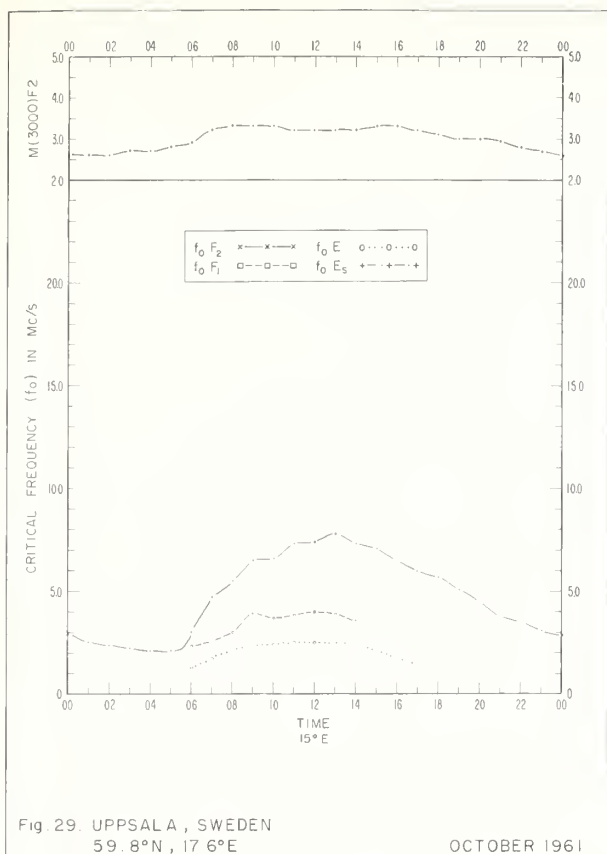
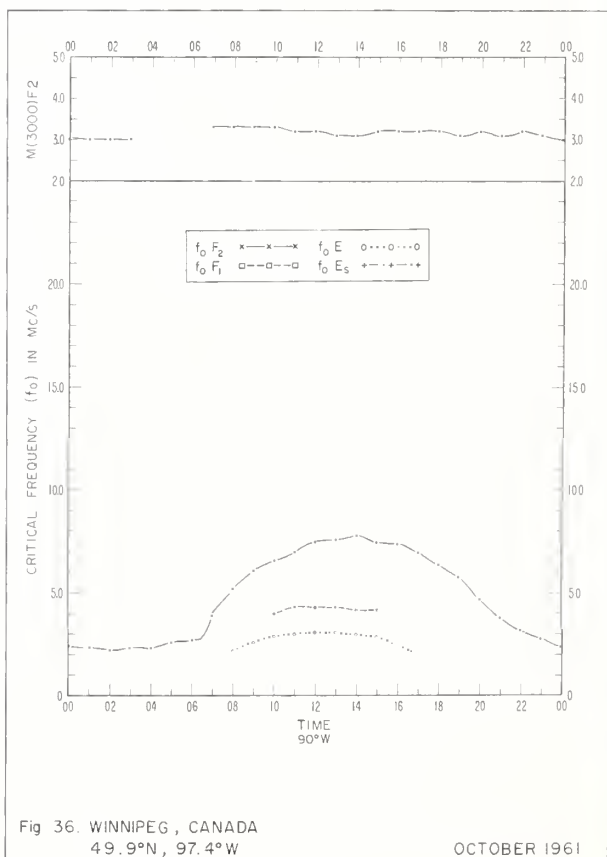
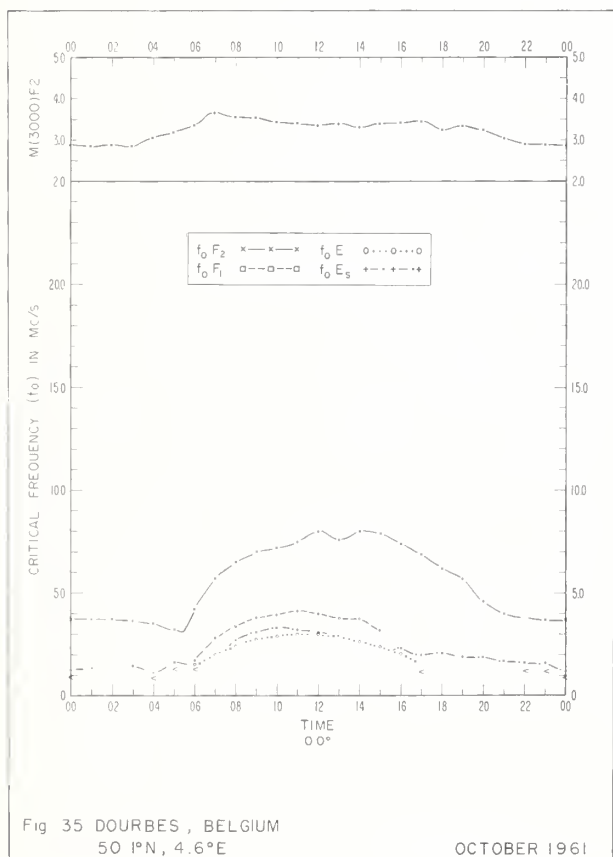
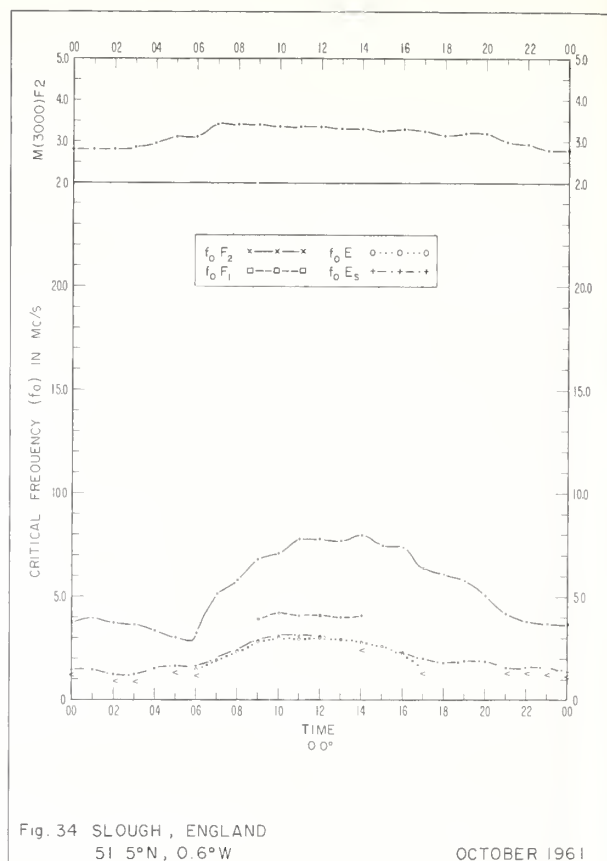
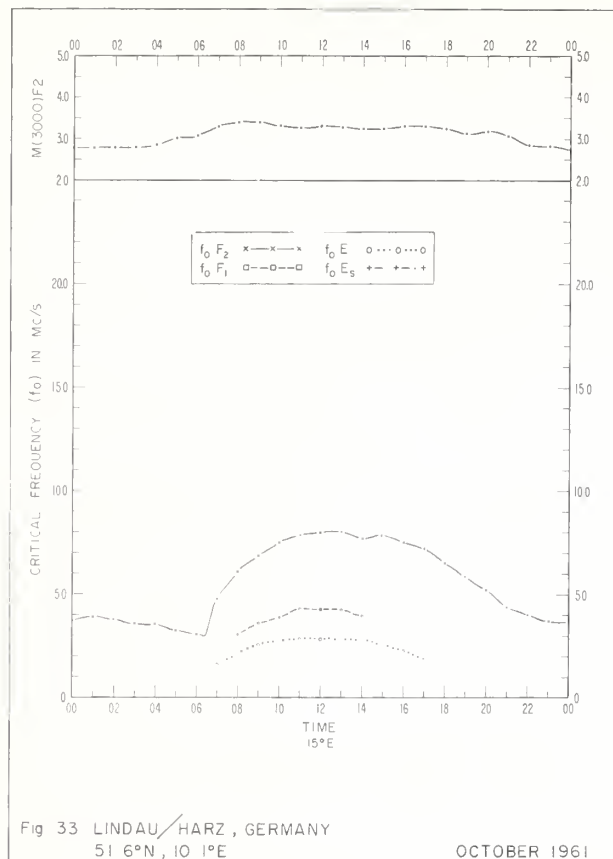


Fig 28. NURMIJARVI, FINLAND  
60.5°N, 24.6°E

OCTOBER 1961







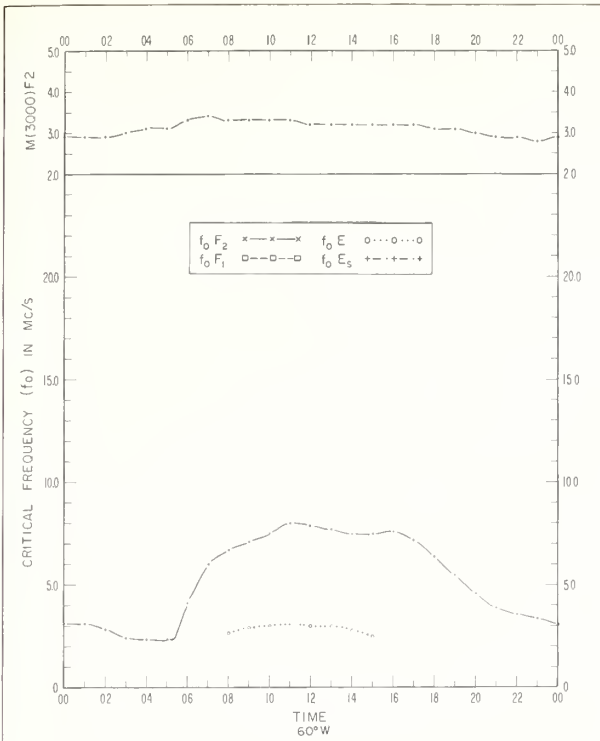


Fig. 37. ST. JOHN'S, NEWFOUNDLAND  
47° 6'N, 52° 7'W

OCTOBER 1961

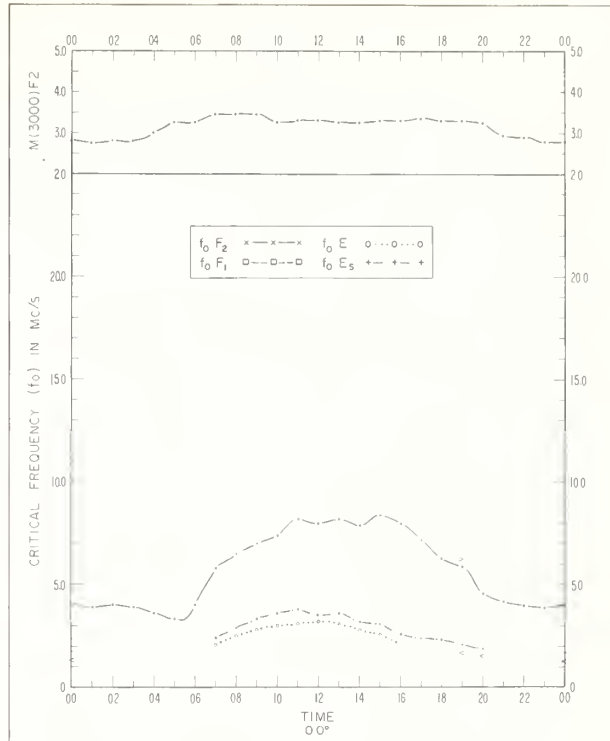


Fig. 38. GARCHY, FRANCE  
47° 3'N, 3° 1'E

OCTOBER 1961

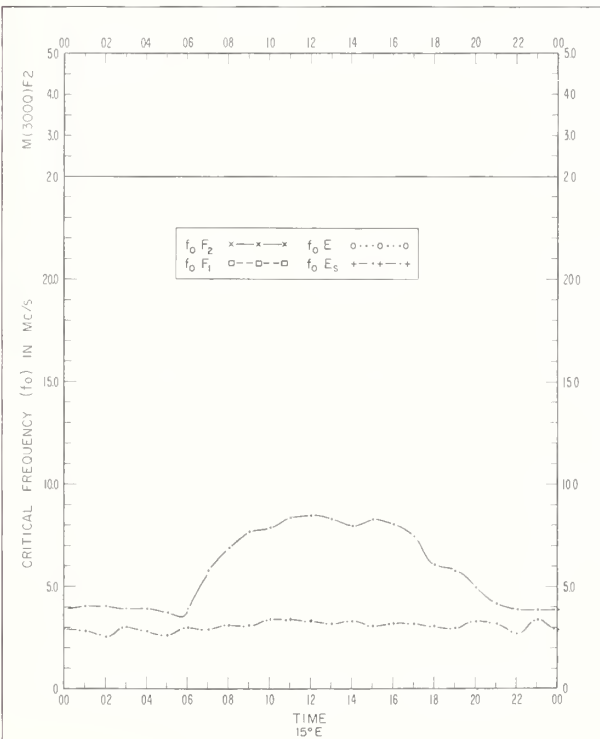


Fig. 39. GRAZ, AUSTRIA  
47° 1'N, 15° 5'E

OCTOBER 1961

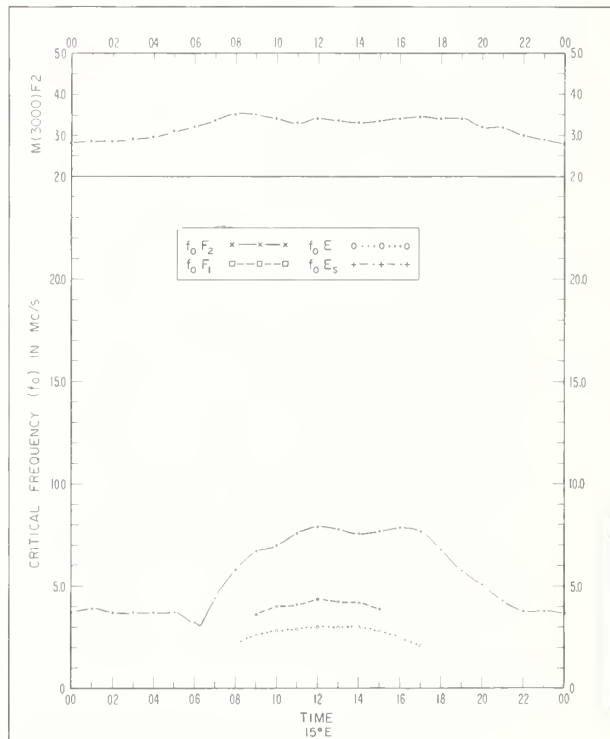
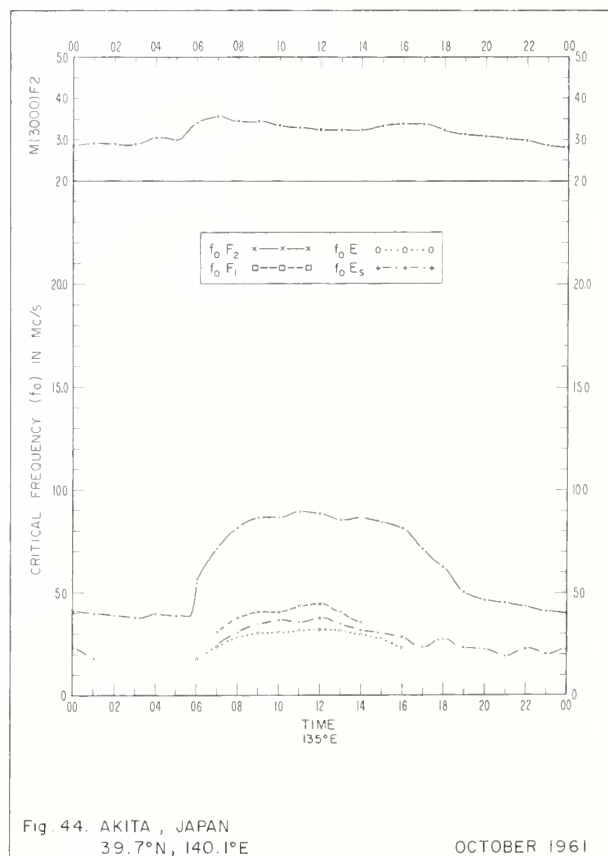
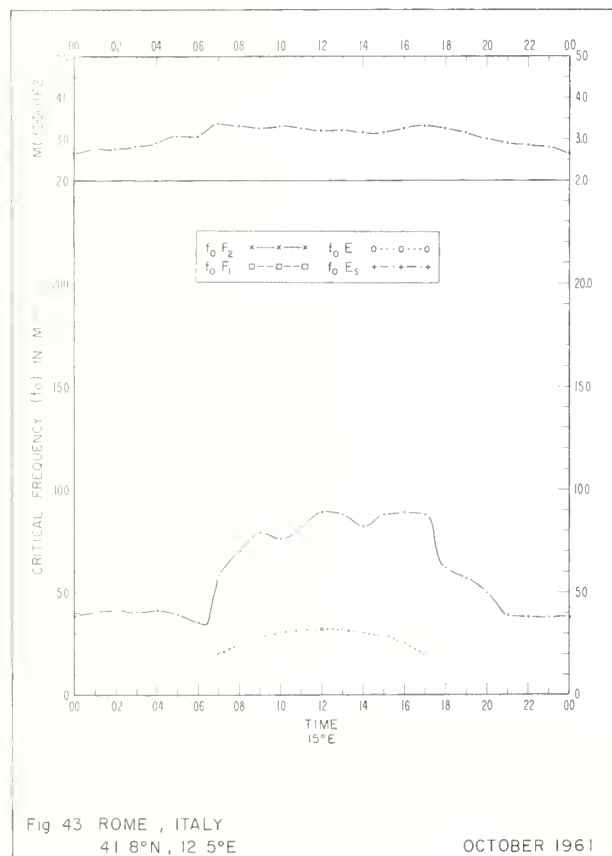
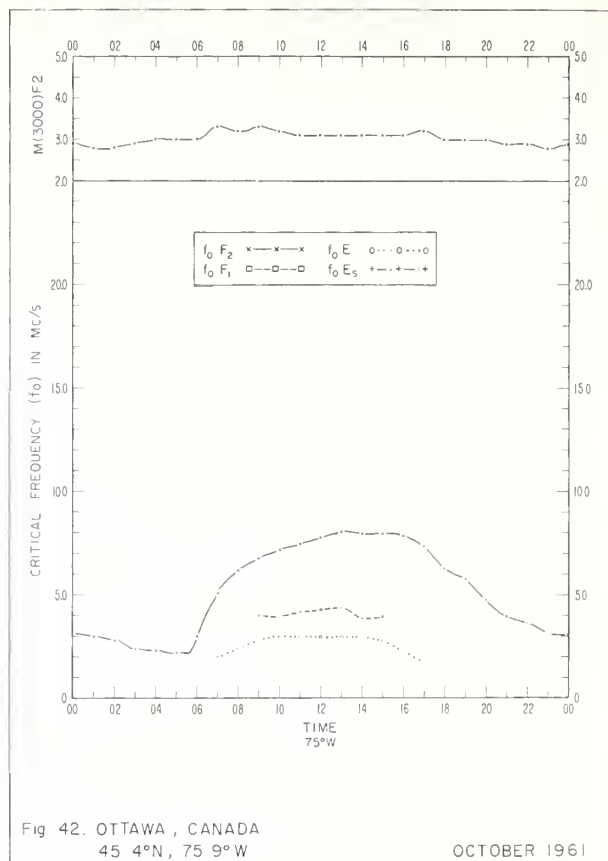
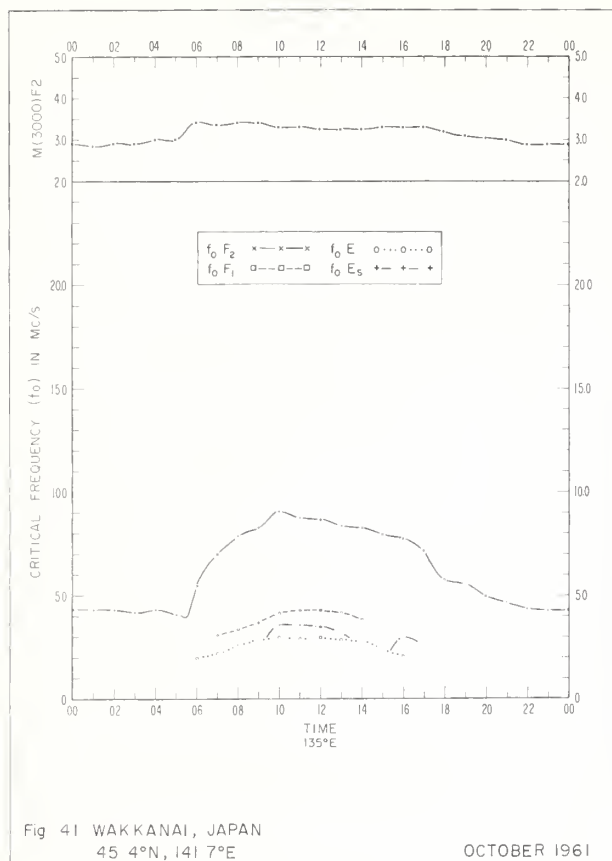
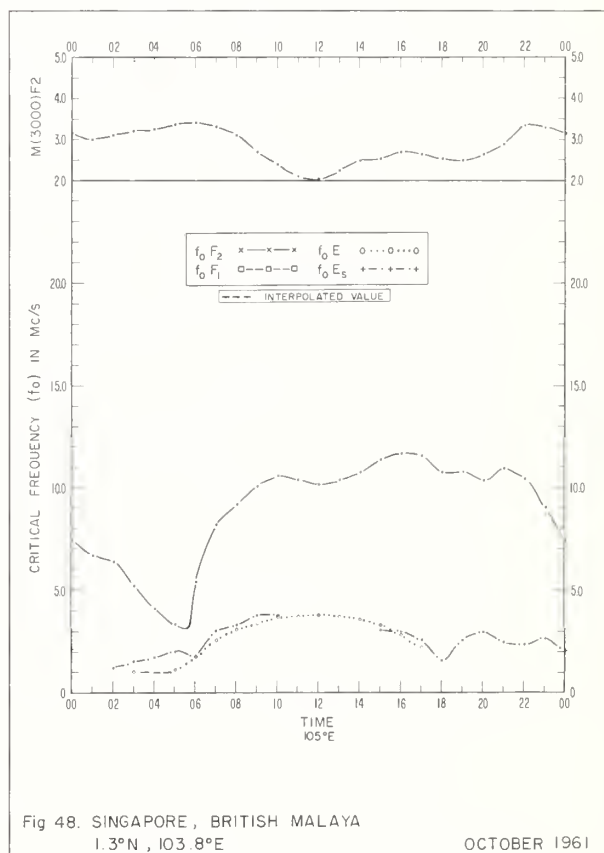
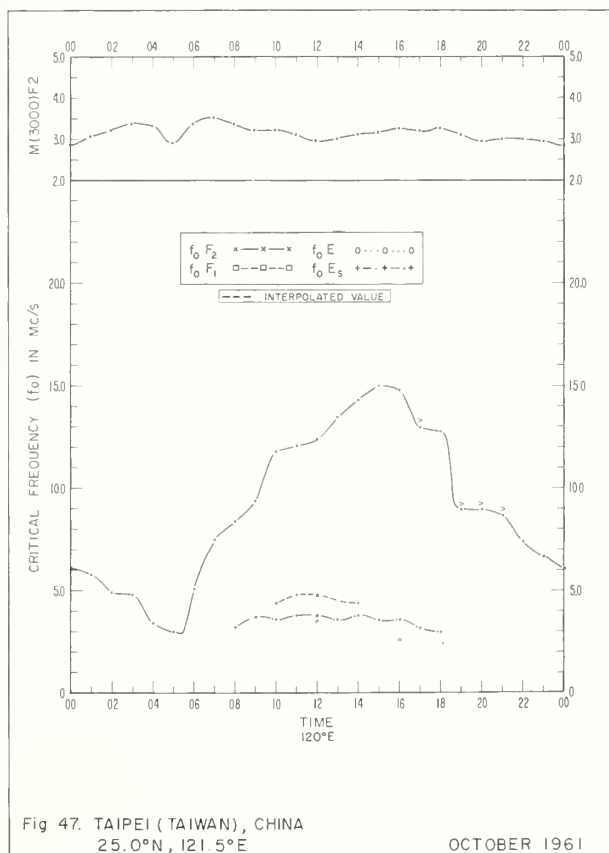
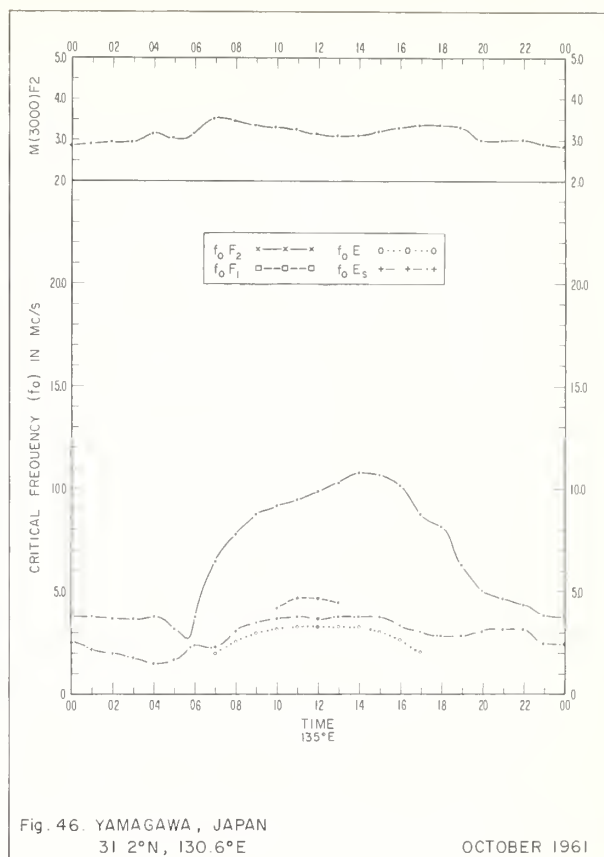
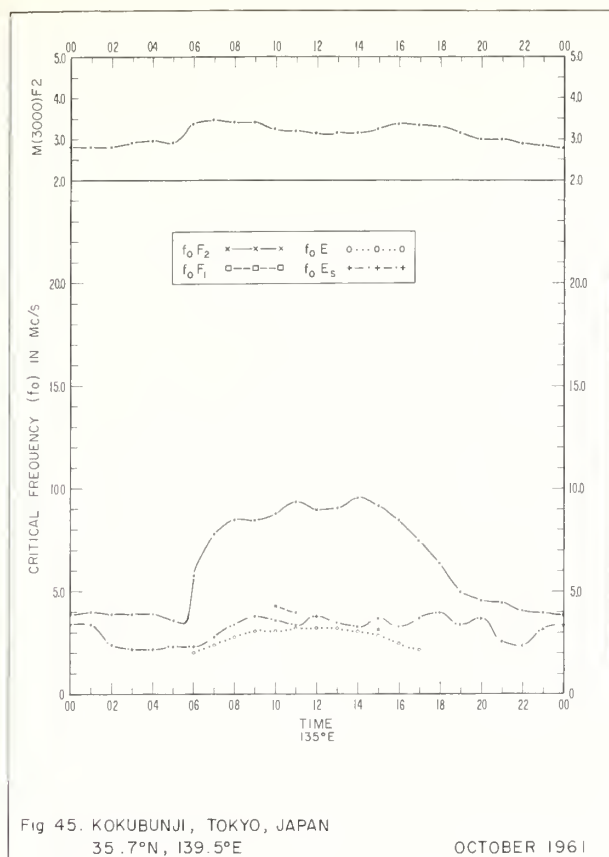
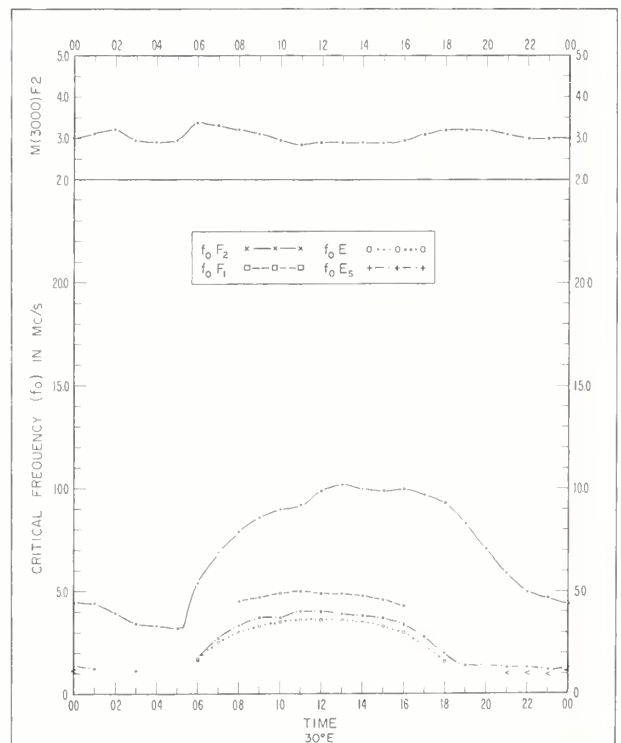
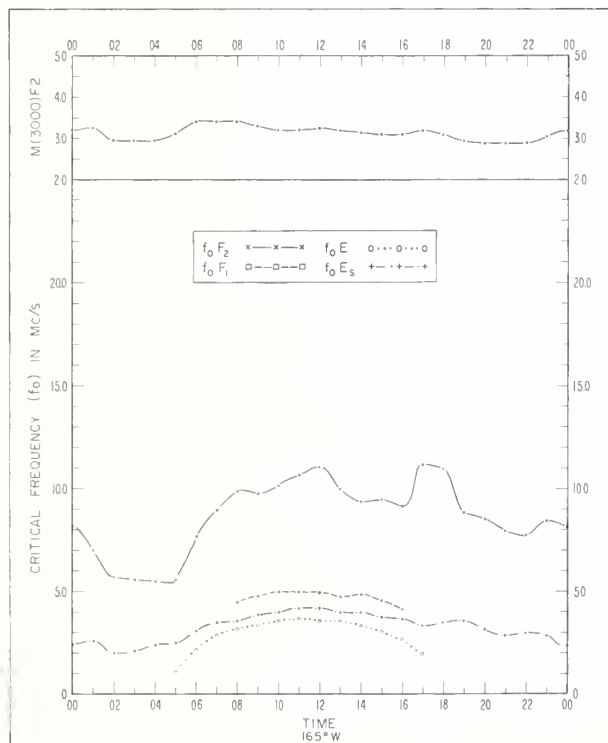
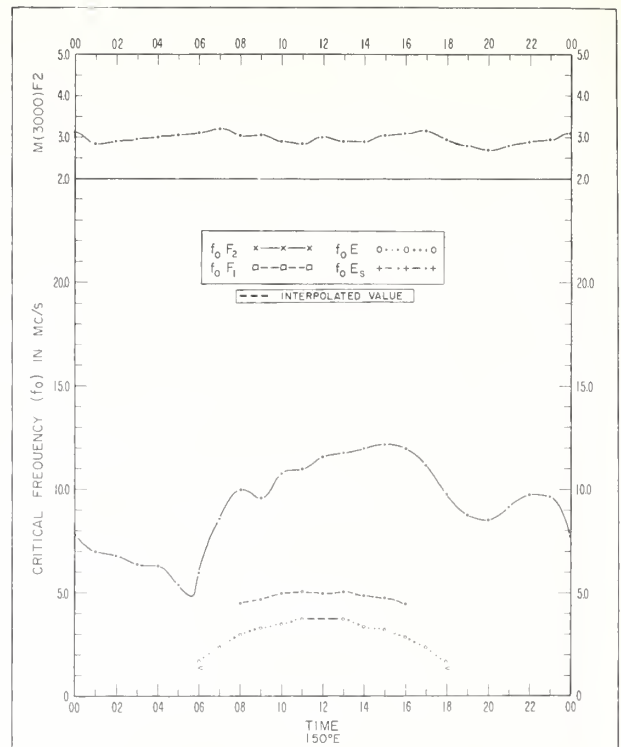
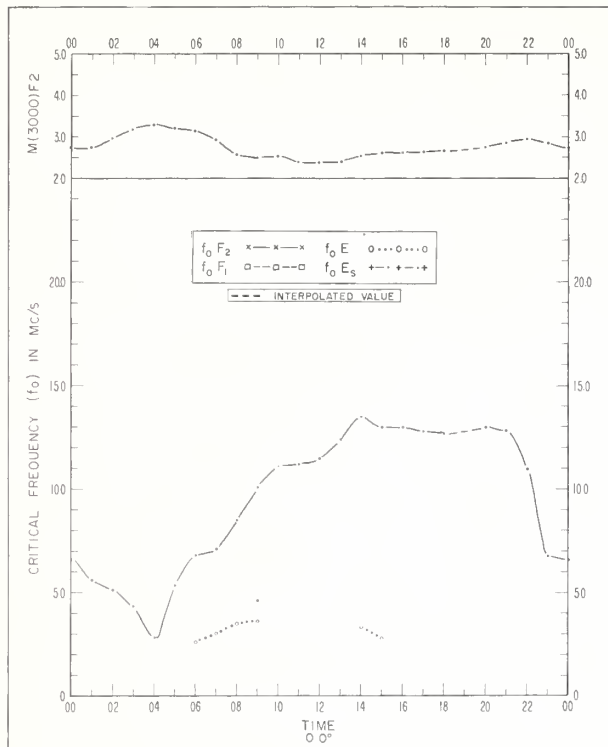


Fig. 40. SOTTENS, SWITZERLAND  
46° 6'N, 6° 7'E

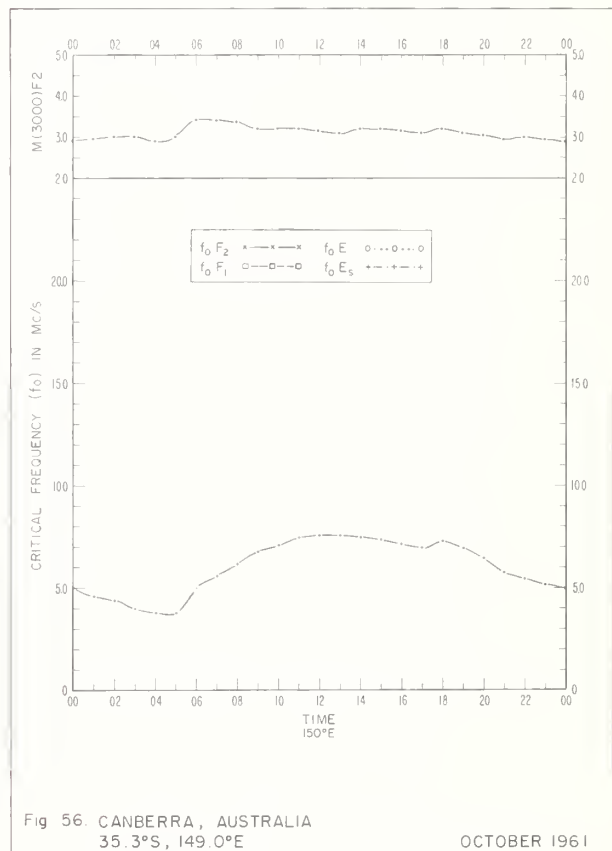
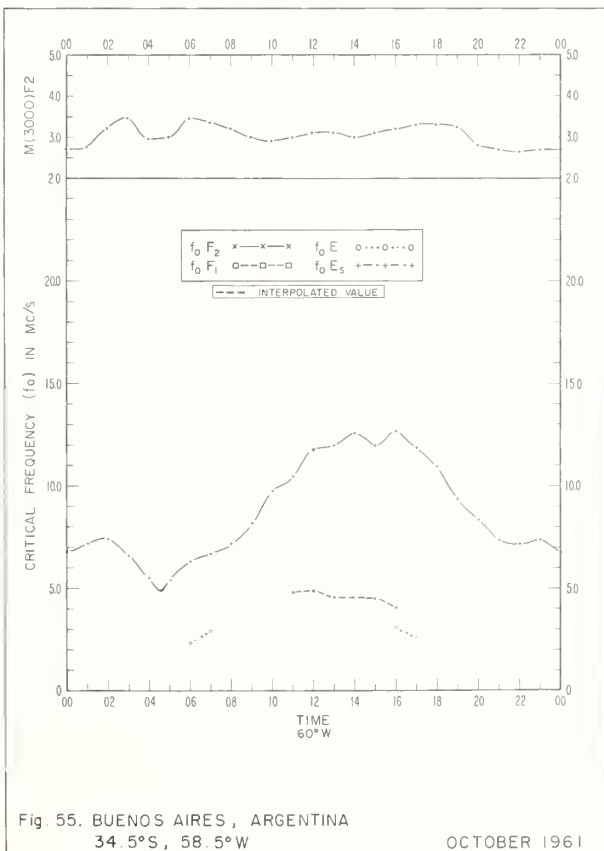
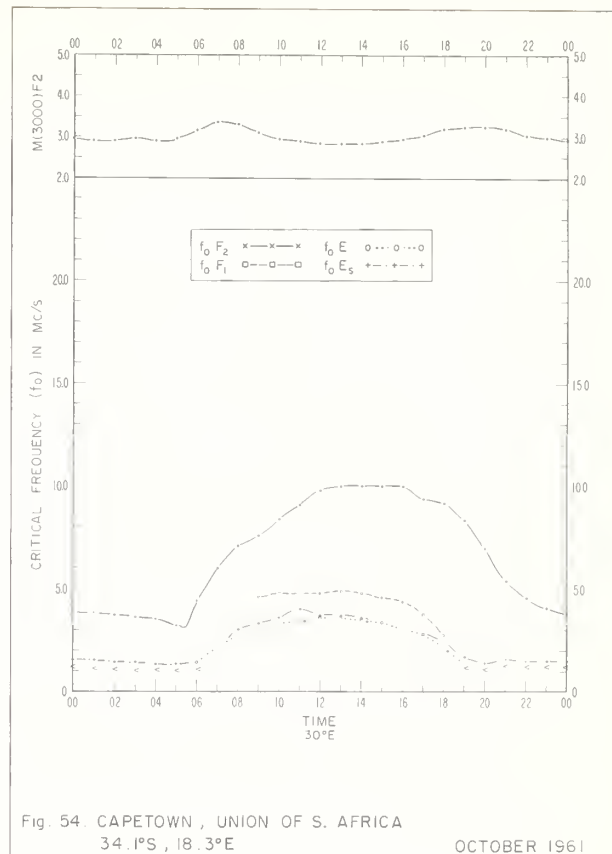
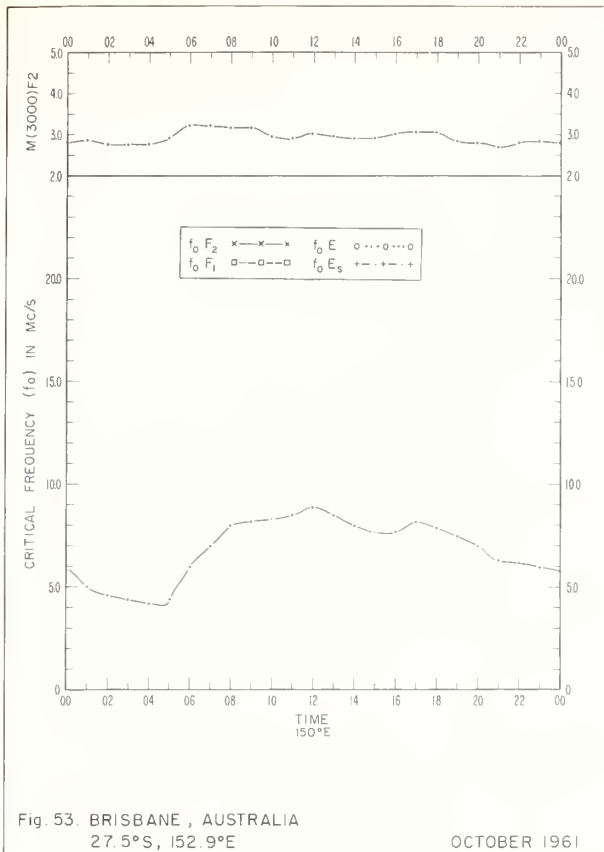
OCTOBER 1961

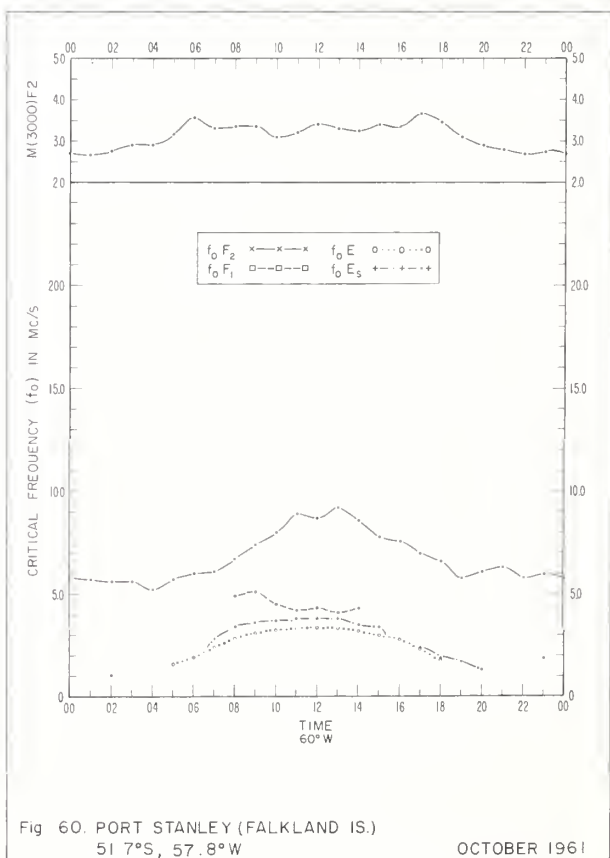
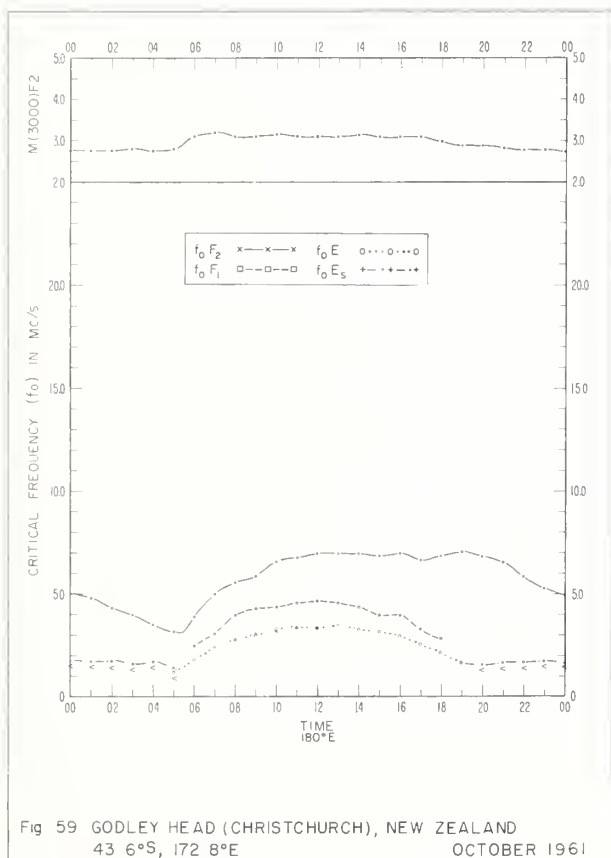
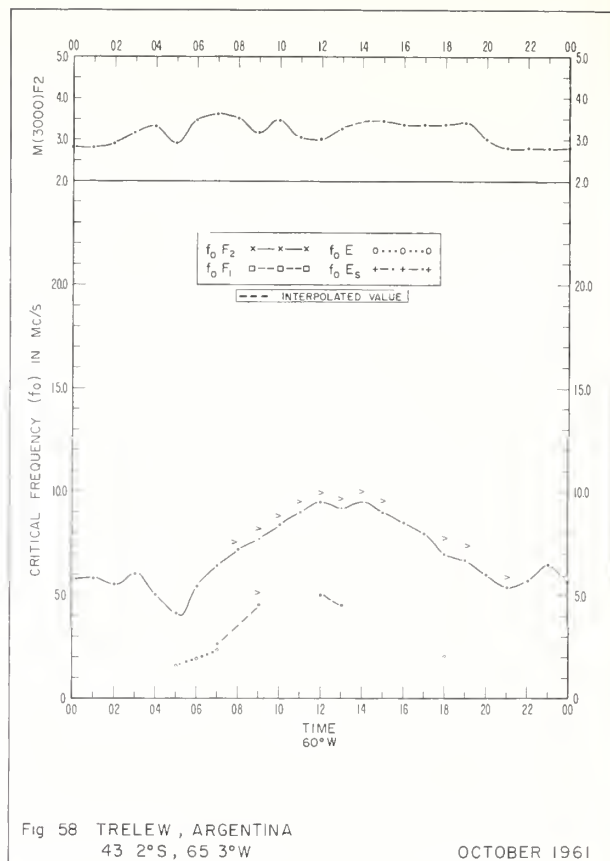
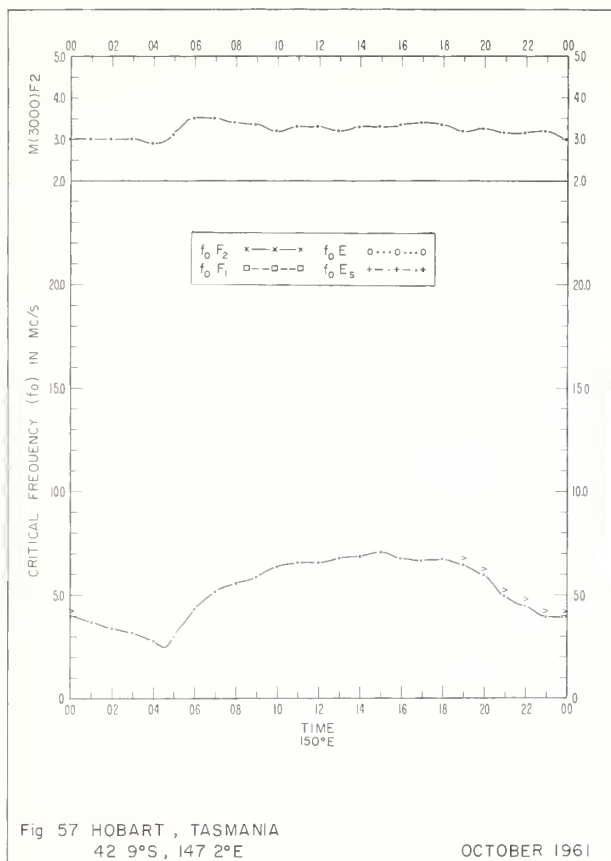


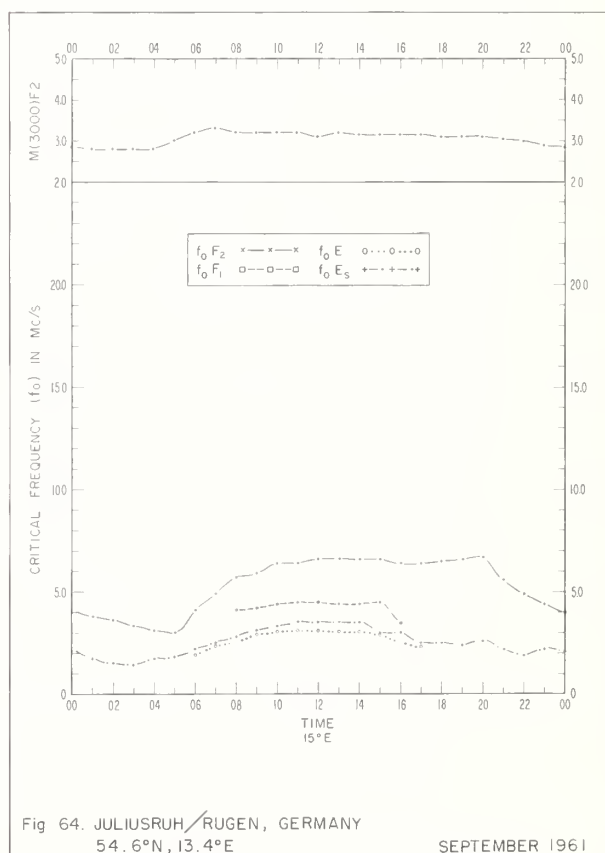
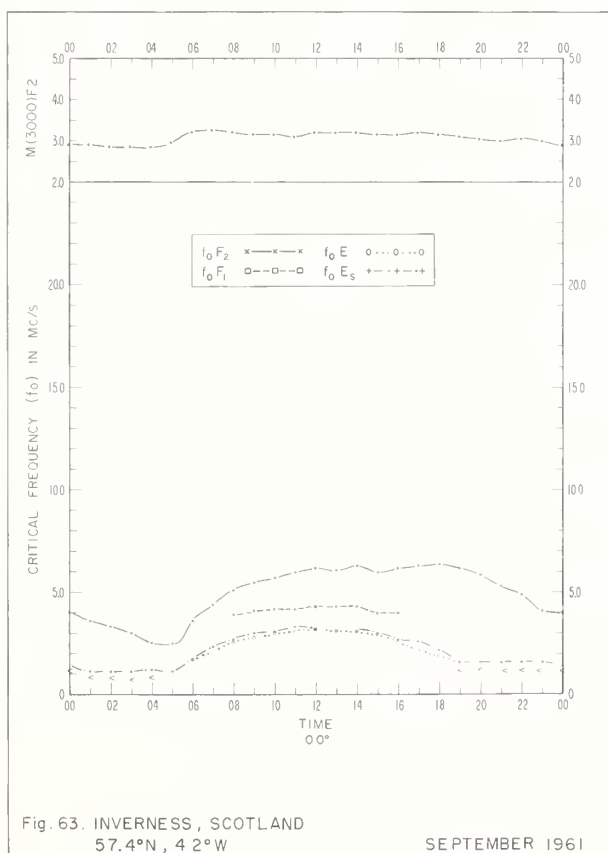
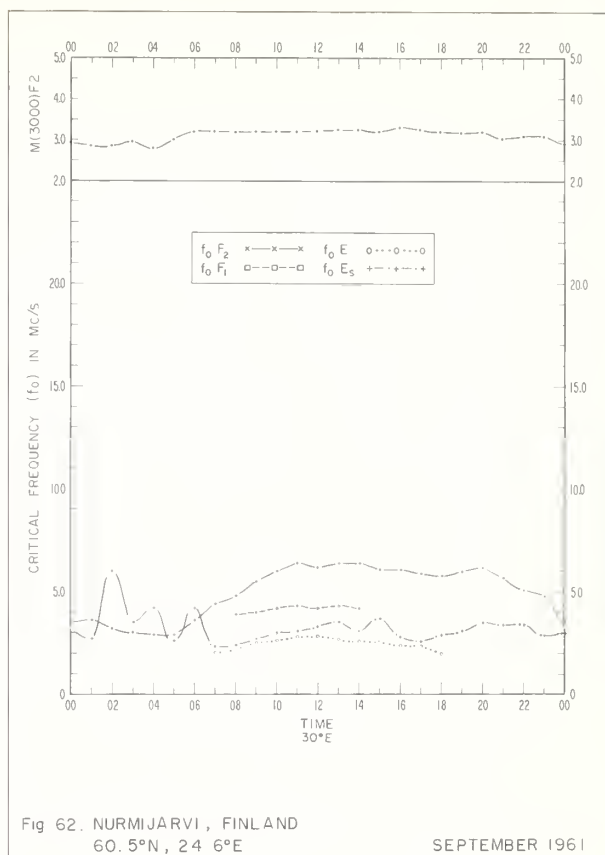
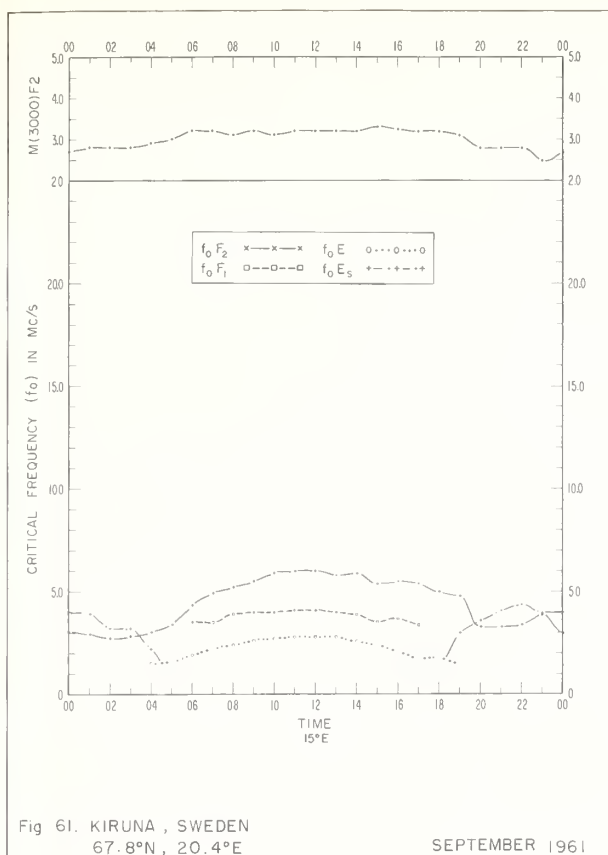


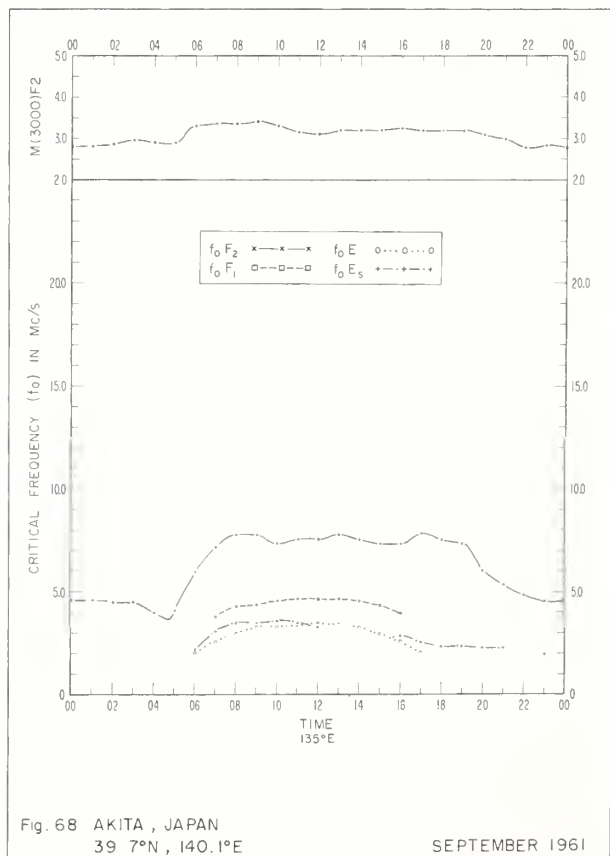
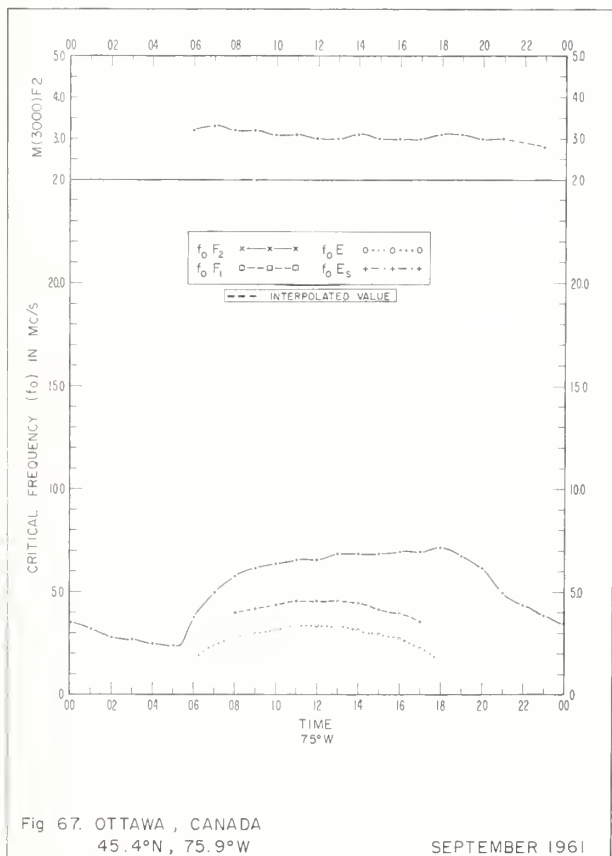
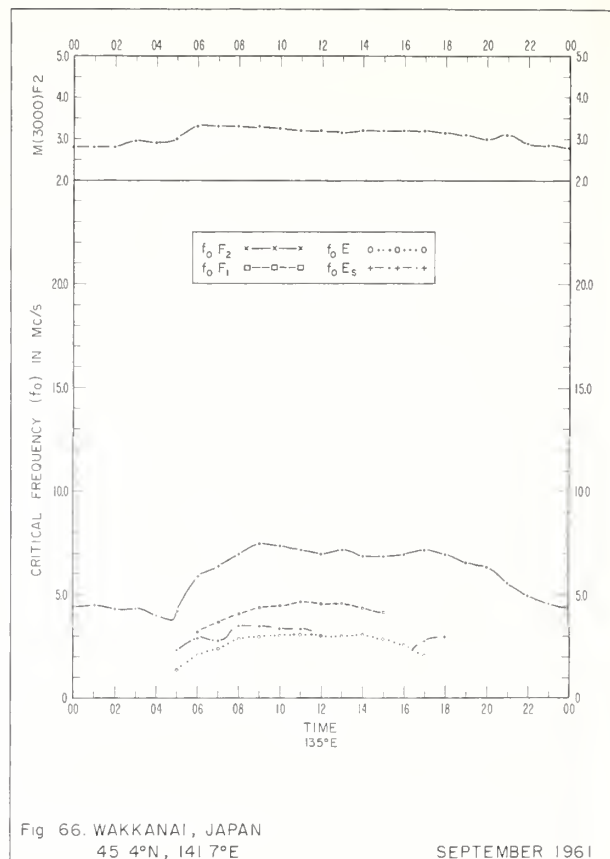
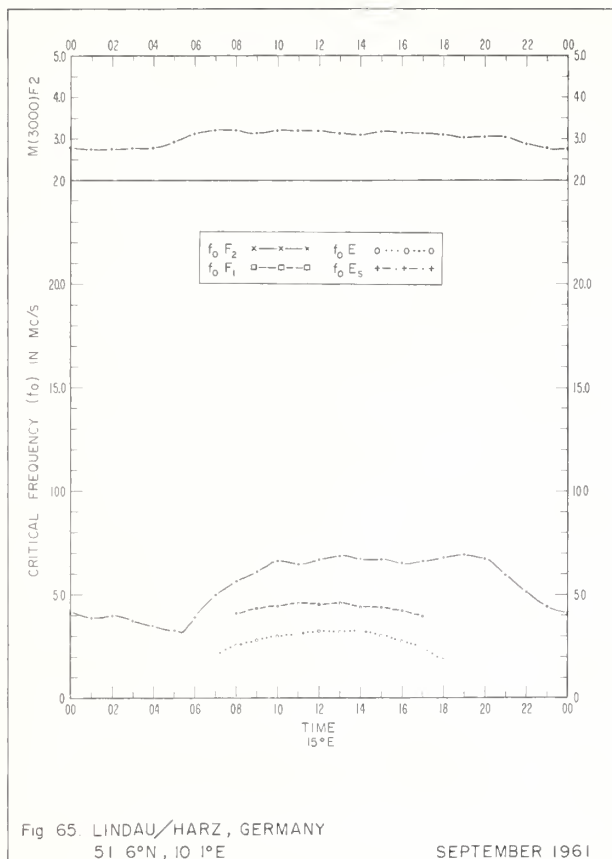












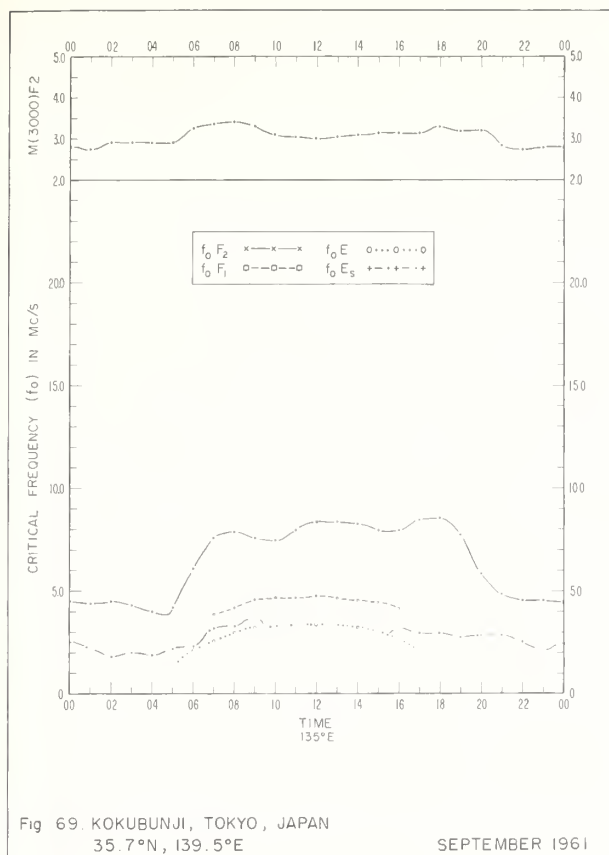


Fig 69. KOKUBUNJI, TOKYO, JAPAN  
35.7°N, 139.5°E

SEPTEMBER 1961

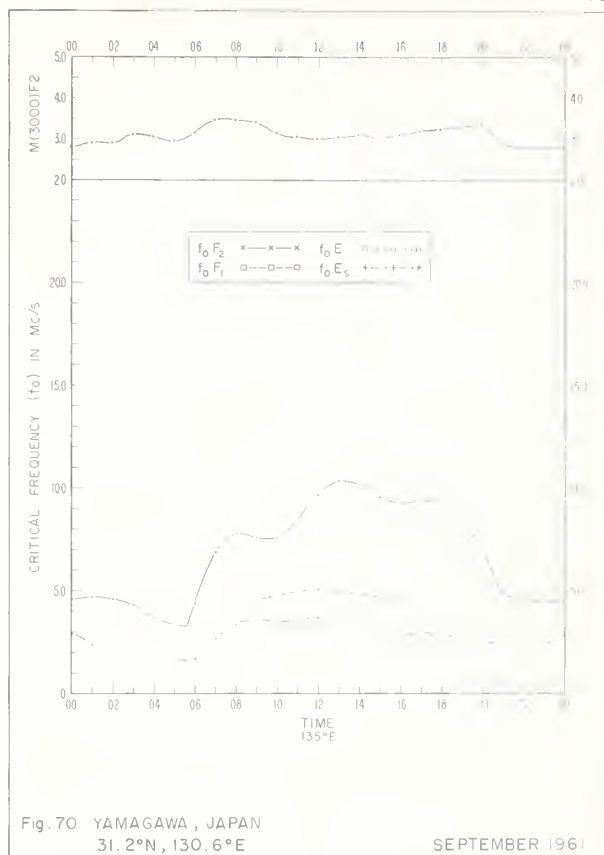


Fig 70. YAMAGAWA, JAPAN  
31.2°N, 130.6°E

SEPTEMBER 1961

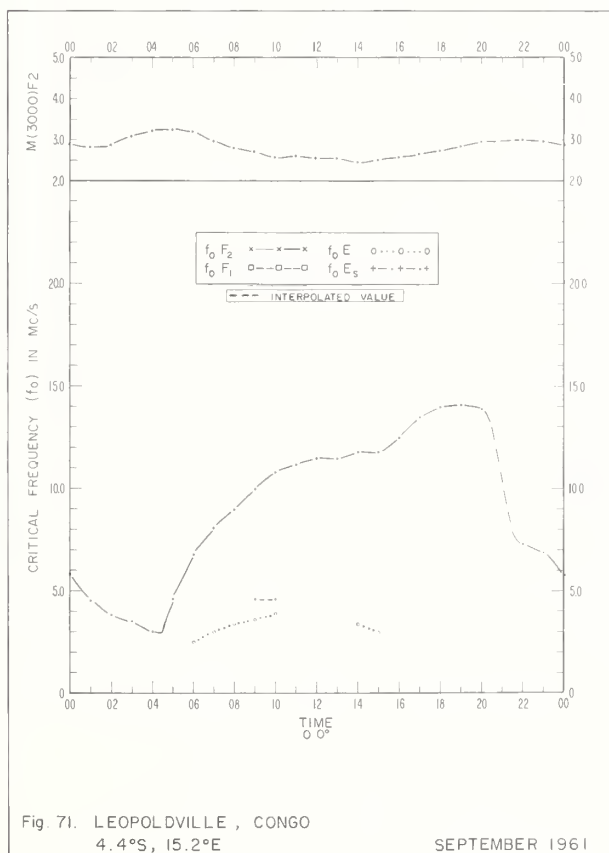


Fig 71. LEOPOLDVILLE, CONGO  
4.4°S, 15.2°E

SEPTEMBER 1961

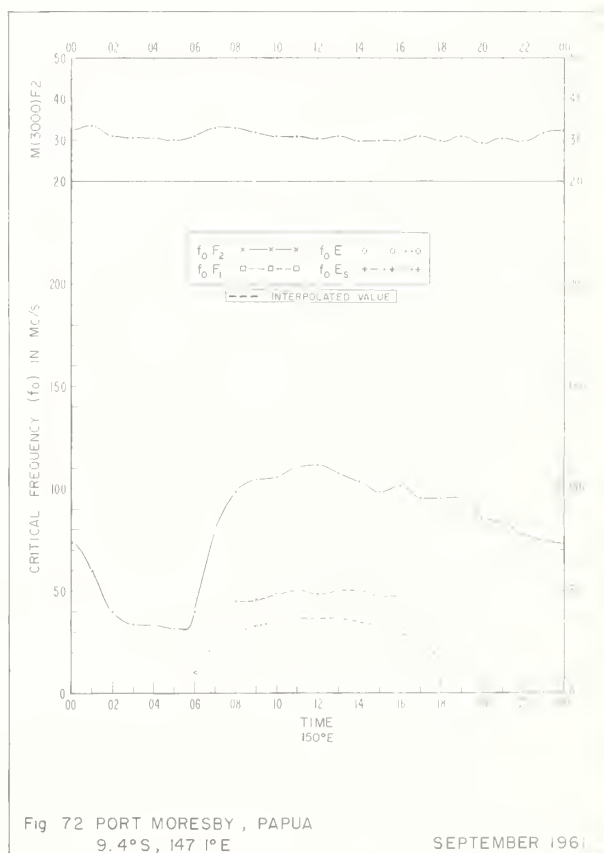


Fig 72. PORT MORESBY, PAPUA  
9.4°S, 147.1°E

SEPTEMBER 1961

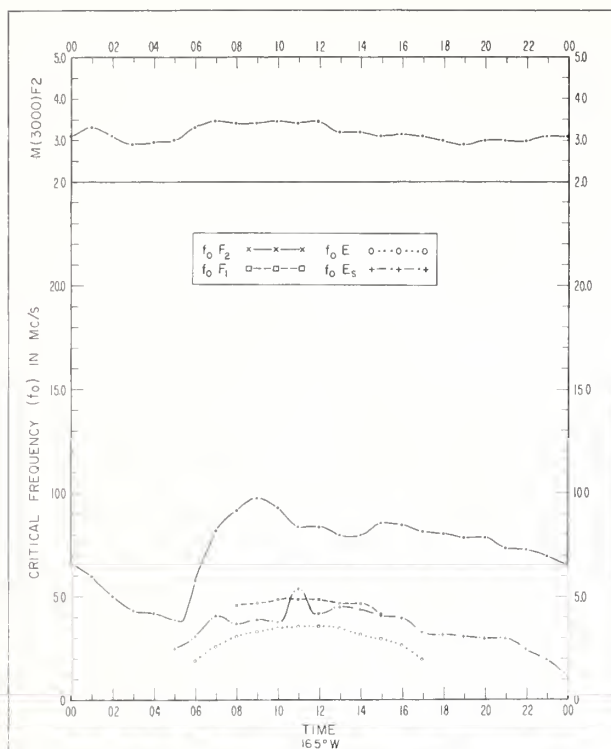


Fig 73 RAROTONGA, COOK IS.  
21.2°S, 159.8°W

SEPTEMBER 1961

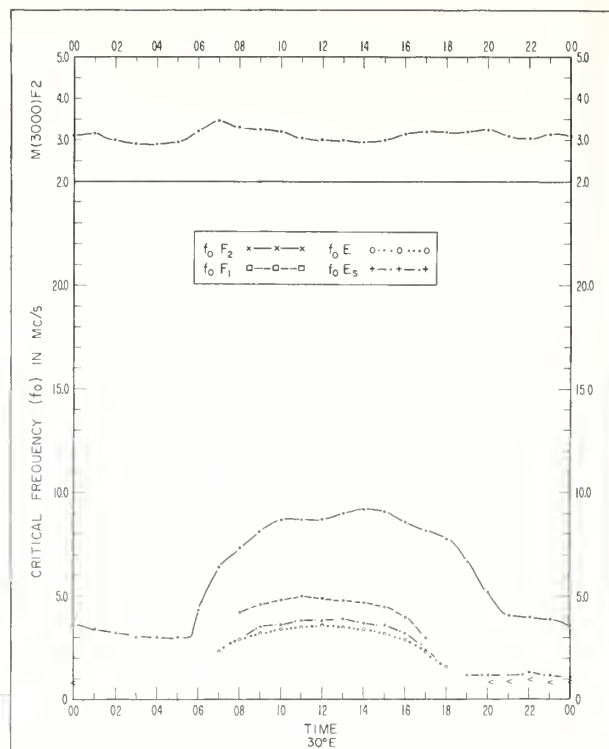


Fig 74 JOHANNESBURG, UNION OF S AFRICA  
26.1°S, 28.1°E

SEPTEMBER 1961

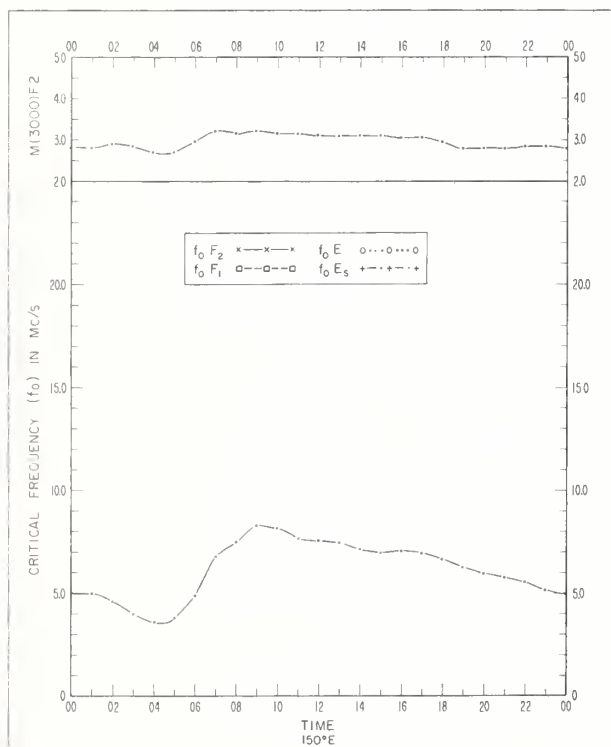


Fig 75 BRISBANE, AUSTRALIA  
27.5°S, 152.9°E

SEPTEMBER 1961

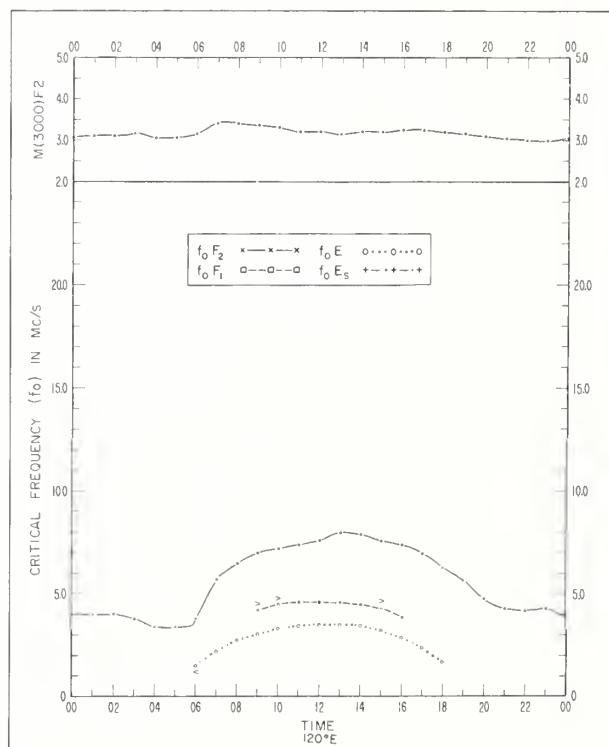


Fig 76 MUNDARING, WESTERN AUSTRALIA  
32.0°S, 116.2°E

SEPTEMBER 1961



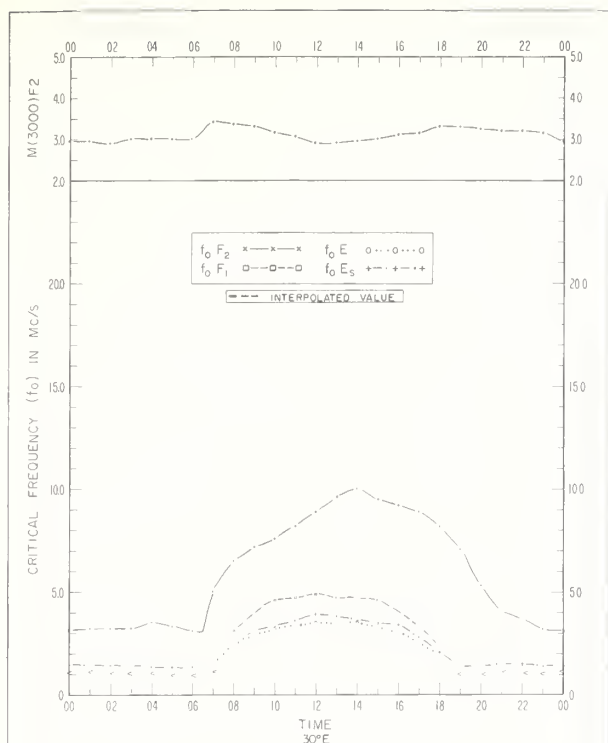


Fig 77 CAPETOWN, UNION OF S. AFRICA  
34 1°S, 18.3°E

SEPTEMBER 1961

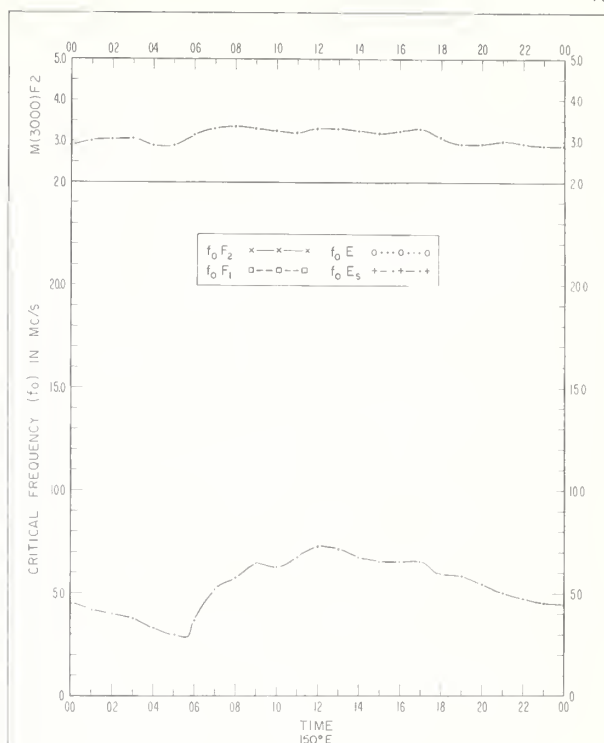


Fig 78 CANBERRA, AUSTRALIA  
35 3°S, 149 0°E

SEPTEMBER 1961

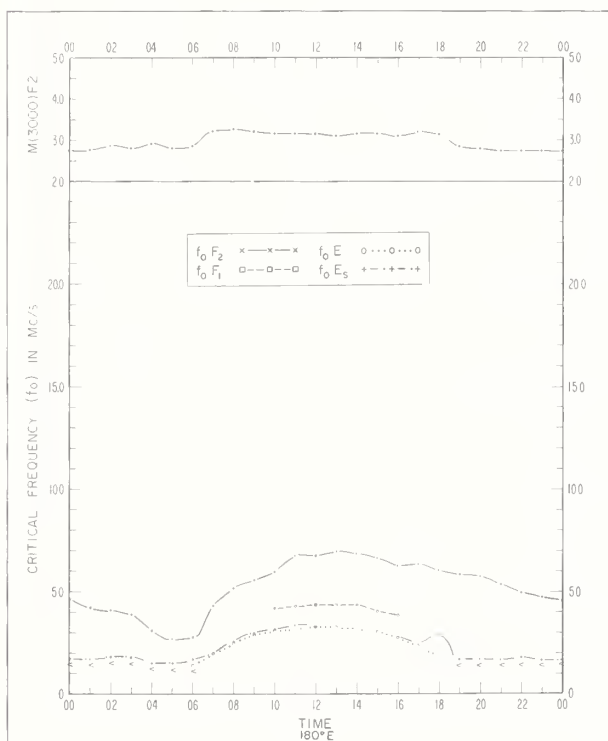


Fig 79 GODLEY HEAD (CHRISTCHURCH), NEW ZEALAND  
43.6°S, 172.8°E

SEPTEMBER 1961

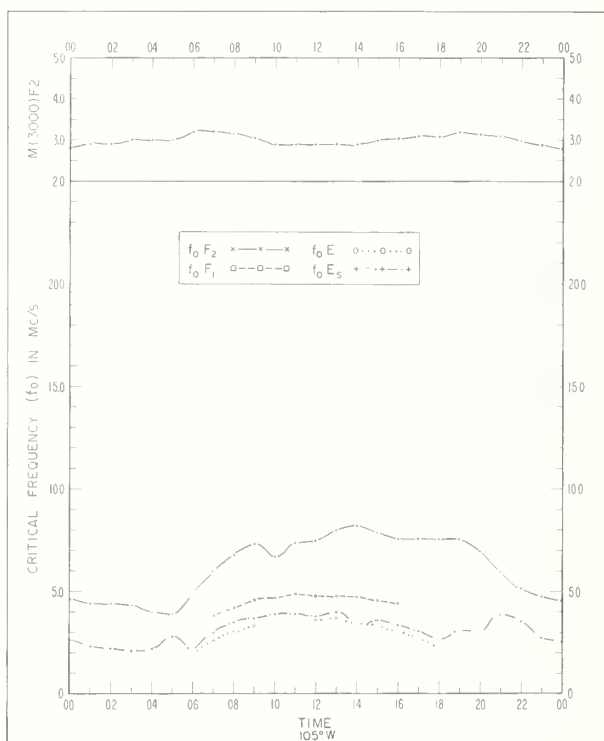
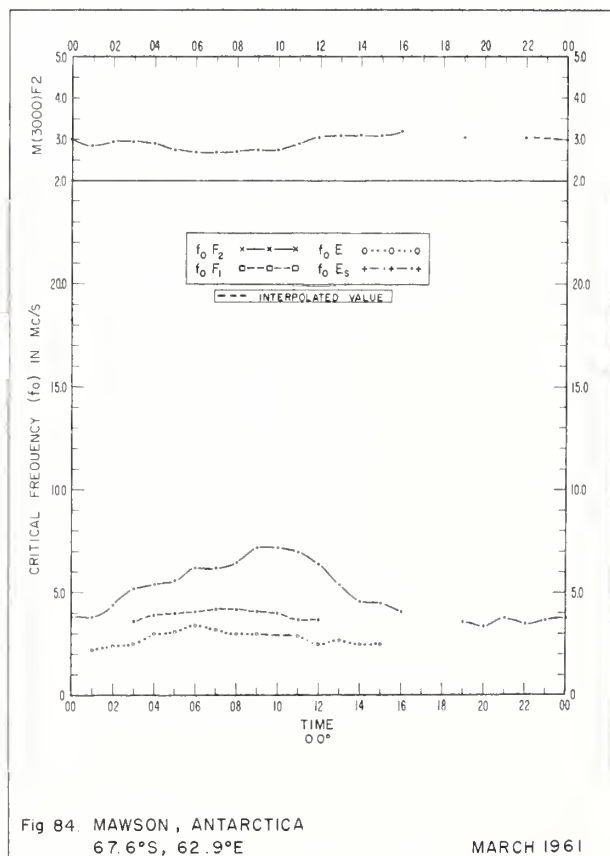
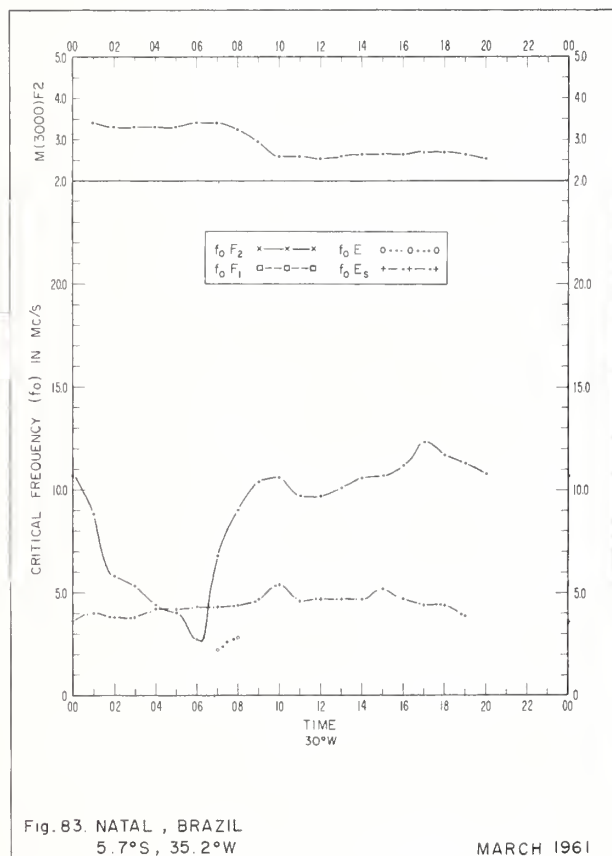
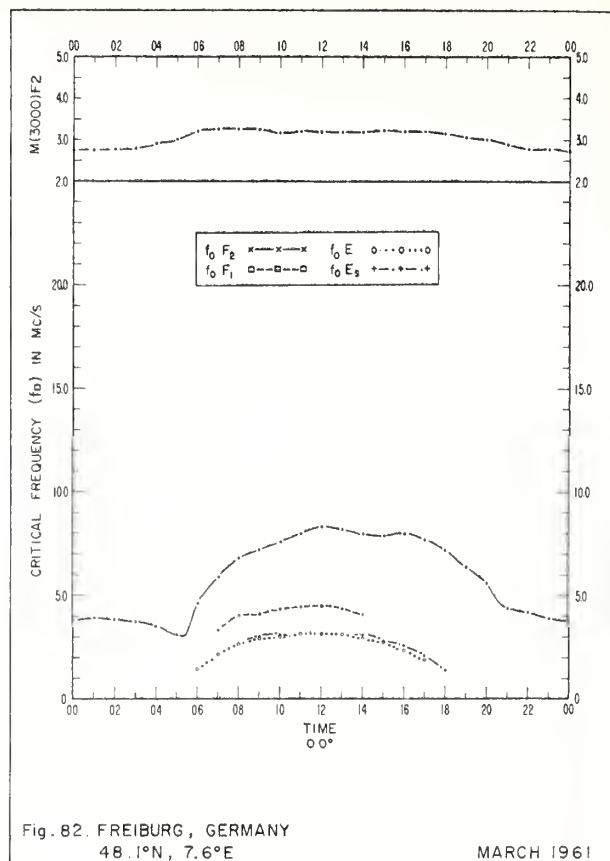
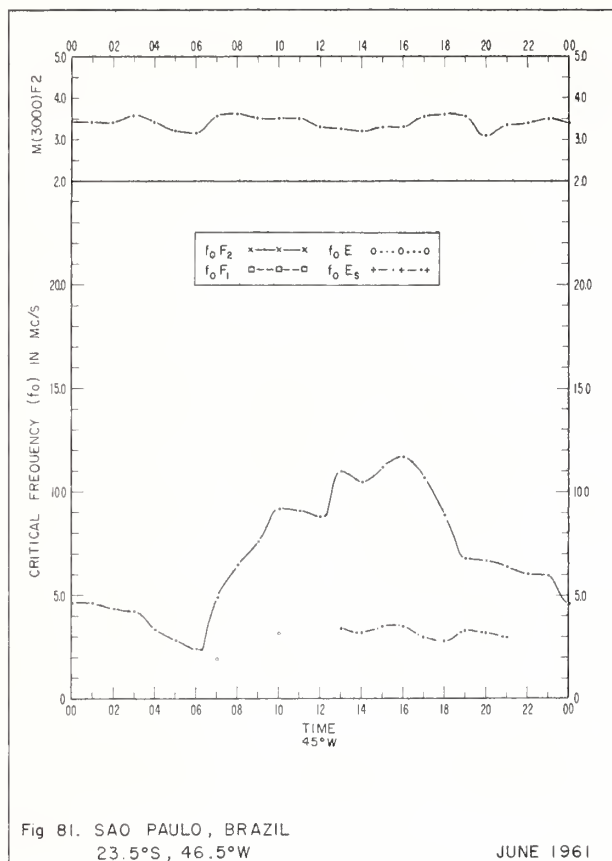


Fig 80. WHITE SANDS, NEW MEXICO  
32 3°N, 106.5°W

AUGUST 1961



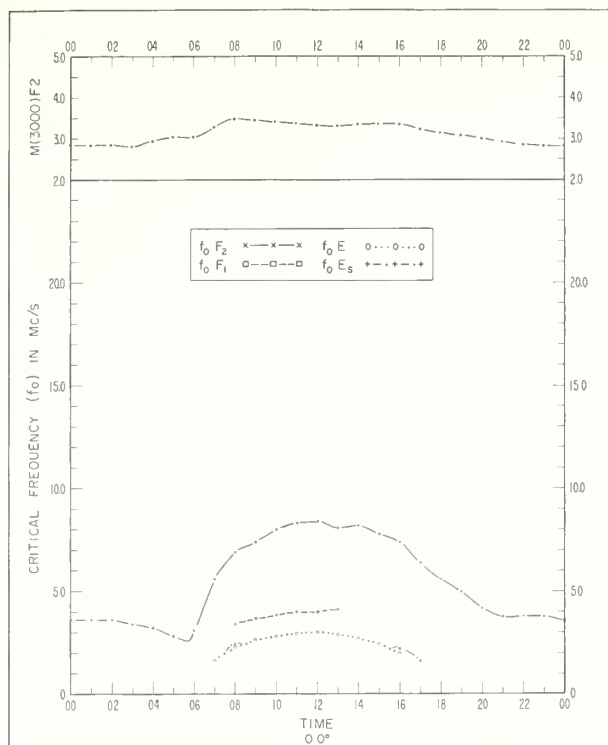


Fig. 85. FREIBURG, GERMANY  
48.1°N, 7.6°E

FEBRUARY 1961

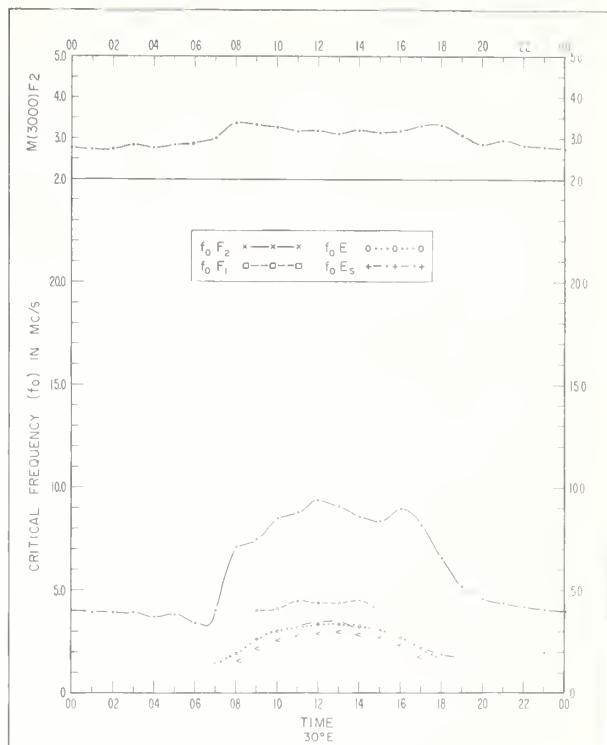


Fig. 86. ATHENS, GREECE  
38.0°N, 23.6°E

FEBRUARY 1961

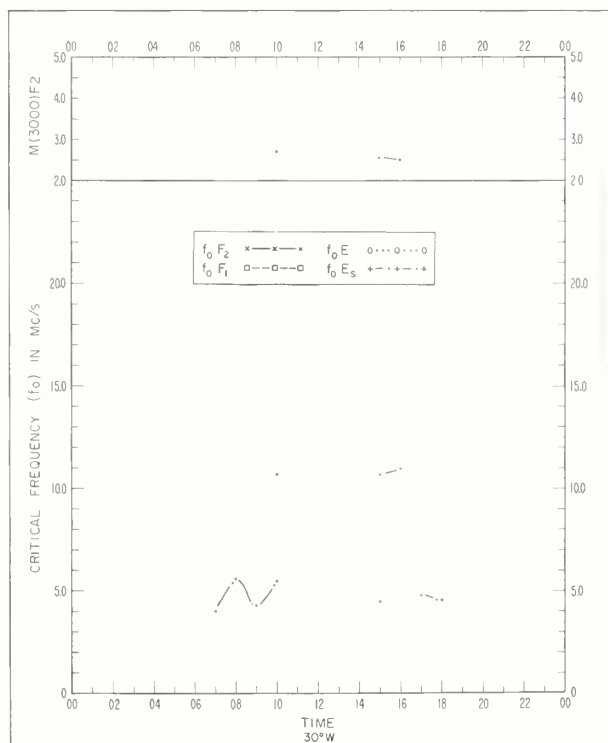


Fig. 87. NATAL, BRAZIL  
5.7°S, 35.2°W

FEBRUARY 1961

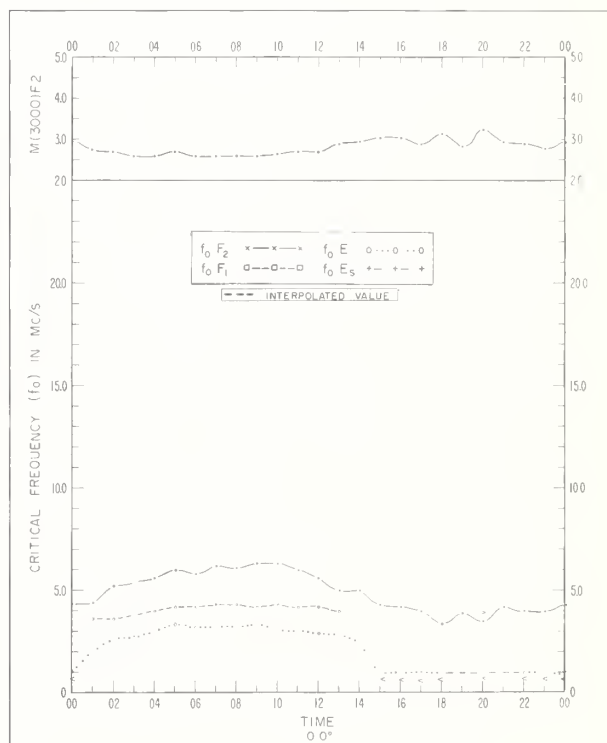
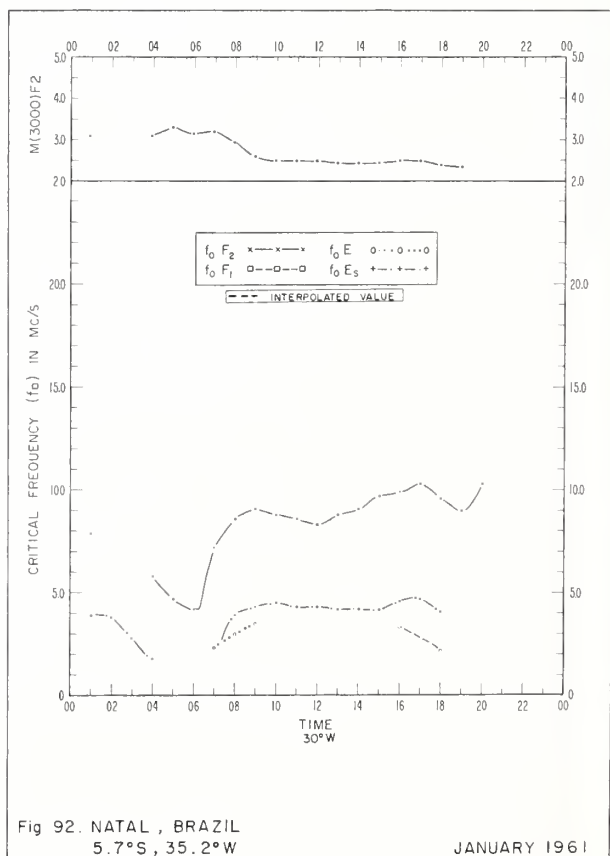
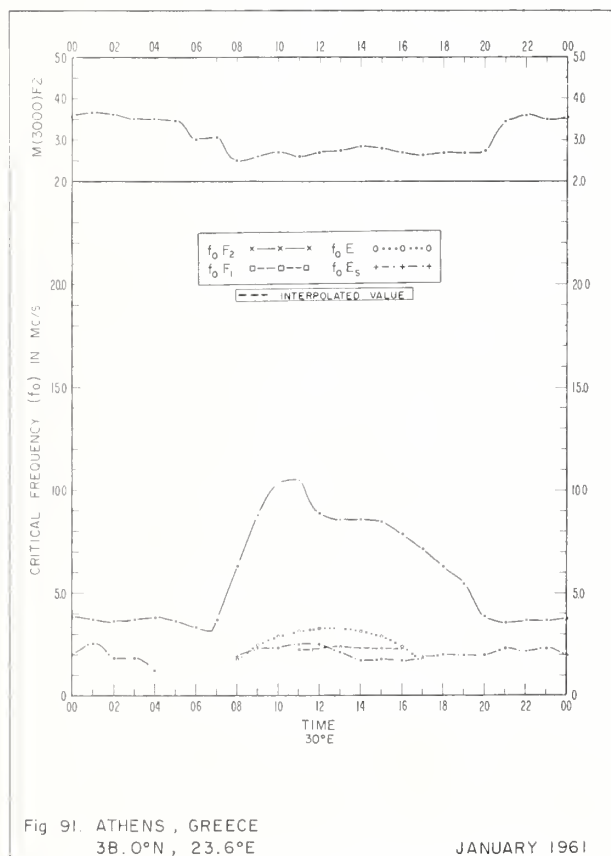
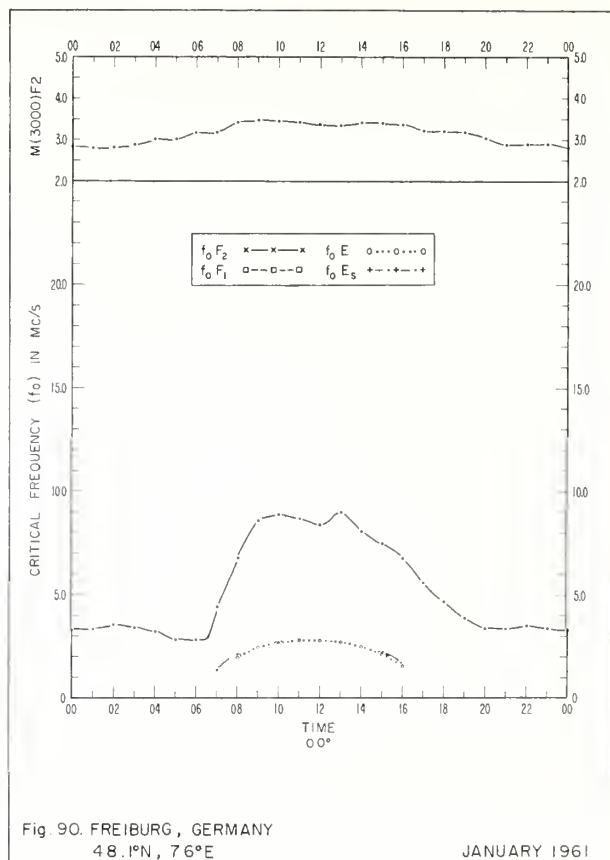
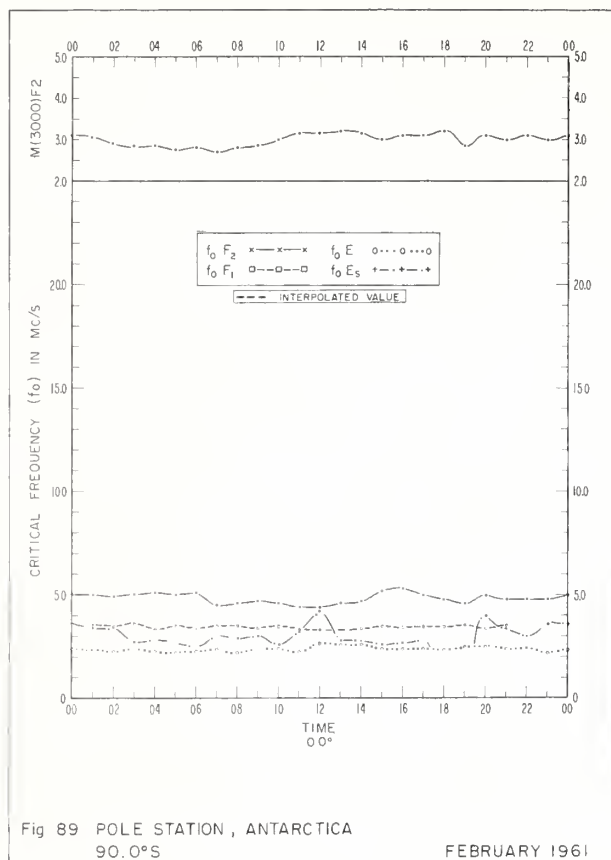
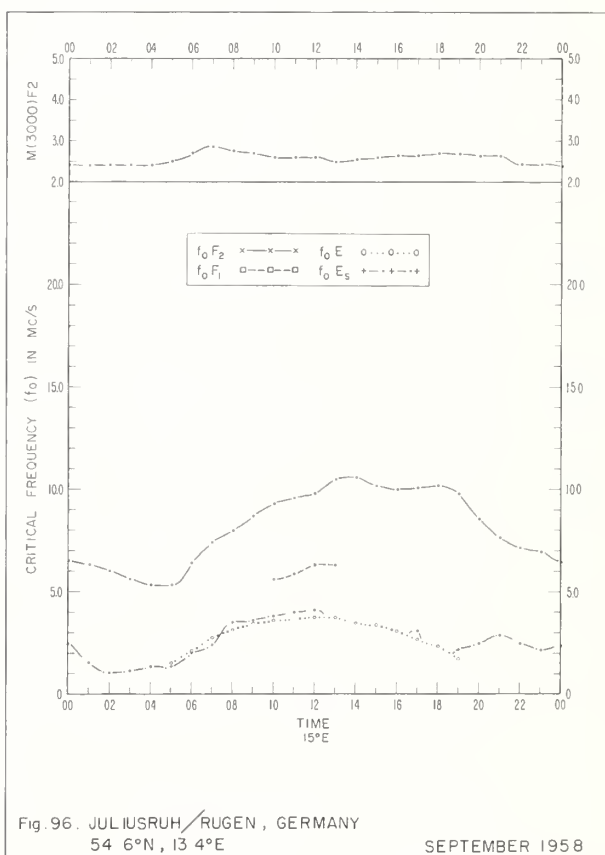
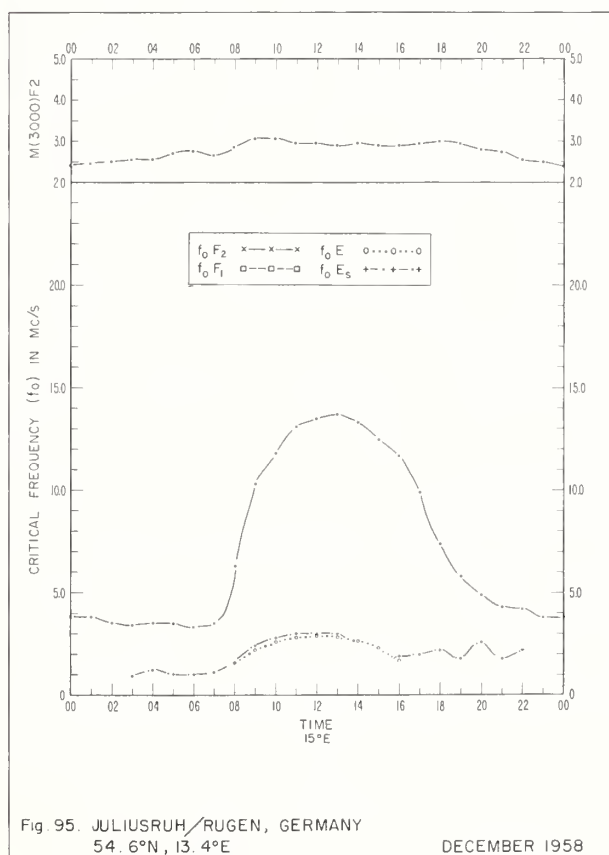
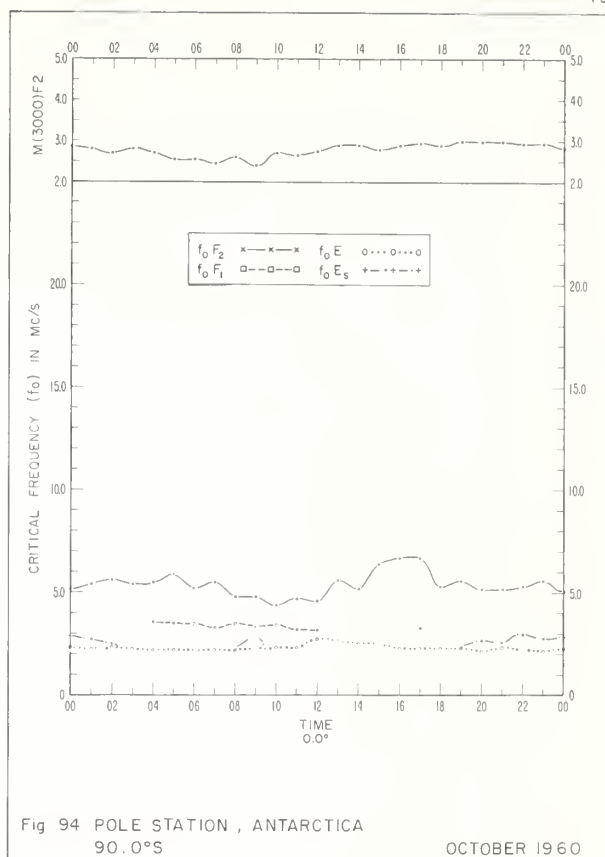
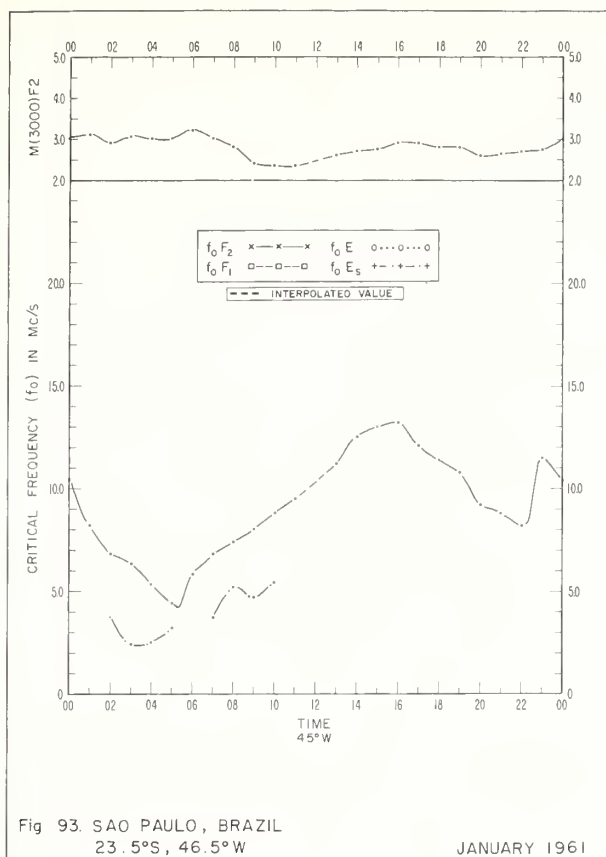
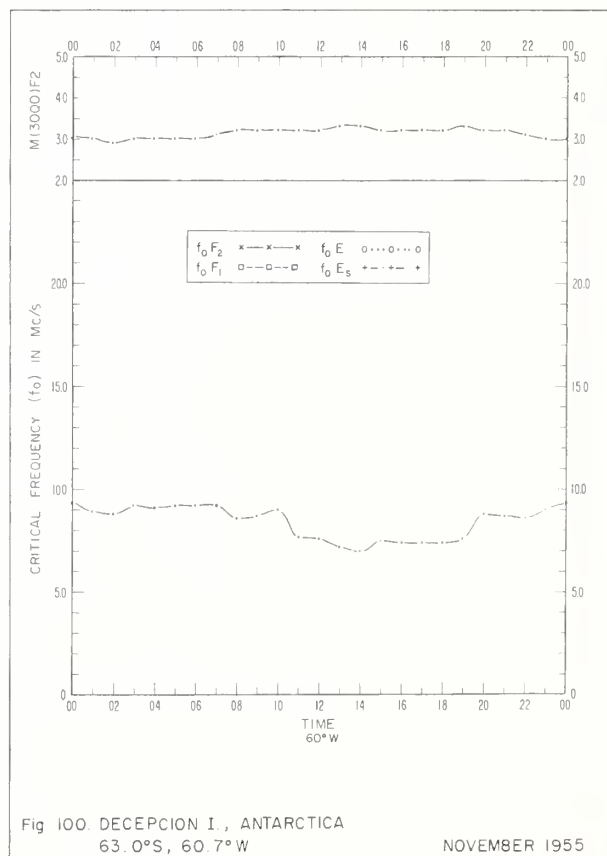
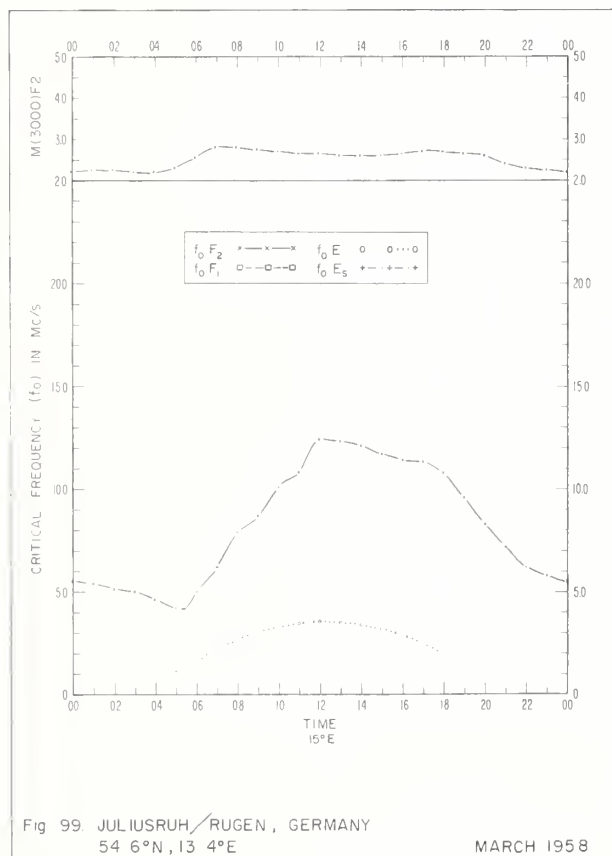
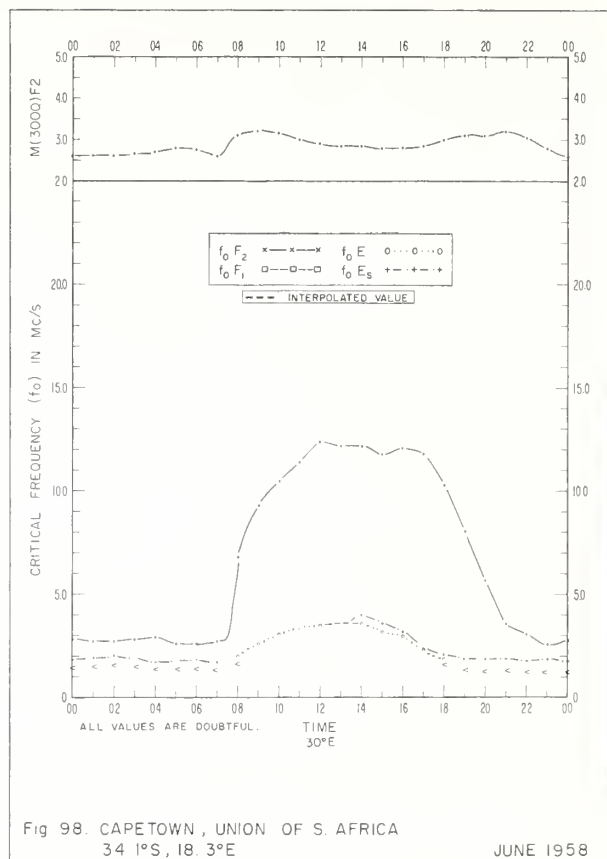
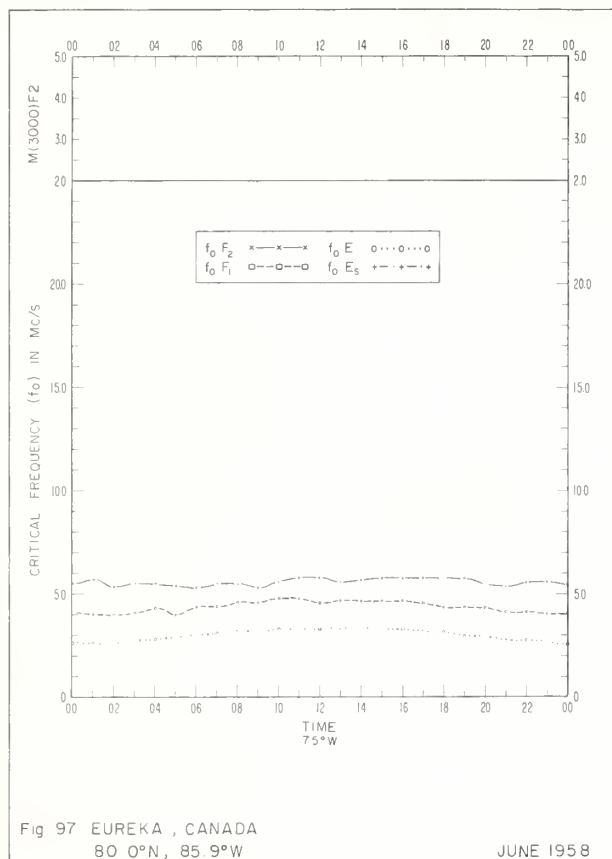


Fig. 88. MAWSON, ANTARCTICA  
67.6°S, 62.9°E

FEBRUARY 1961









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## CRPL REPORTS

(A detailed list of CRPL publications is available from the Central Radio Propagation Laboratory on request.)

### Catalog of Data.

A catalog of records and data on file at the U.S. IGY World Data Center A for Airglow and Ionosphere, Boulder Laboratories, National Bureau of Standards, Boulder, Colorado, which includes a fee schedule to cover the cost of supplying copies, is available upon request.

CRPL-F (Part A), "Ionospheric Data."

CRPL-F (Part B), "Solar Geophysical Data."

These monthly bulletins have limited distribution and are sent, in general, only to those individuals and scientific organizations that collaborate in the exchange of ionospheric, solar, geomagnetic, or other radio propagation data of interest to the CRPL. Others may purchase copies of the same data from the U.S. IGY World Data Center A for Airglow and Ionosphere, National Bureau of Standards, Boulder, Colorado.

### "Ionospheric Predictions."

This series of publications is issued monthly, three months in advance, as an aid in determining the best sky-wave frequencies for high frequency communications over any transmission path, at any time of day for average conditions for the month.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. Price 15 cents. Annual subscription (12 issues) \$1.50 (50 cents additional for foreign mailing).

(NOTE: Tested sets of punched cards of the predicted numerical coefficients of numerical maps of the Ionospheric Predictions, for use with electronic computers, may be purchased by arrangement with the Prediction Services Section, CRPL, Boulder Laboratories, Boulder, Colorado.)

National Bureau of Standards Handbook 90, "Handbook for CRPL Ionospheric Predictions Based on Numerical Methods of Mapping." Price 40 cents.

National Bureau of Standards Circular 462, "Ionospheric Radio Propagation." Price \$1.25.

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